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ABSTRACT

In 1989, a study was conducted to assess college and vocational preparatory programs in Florida's community colleges and at Florida A & M University. With respect to college preparatory programs in Florida, the study looked at organizational structure, state-level coordination, student placement, enrollment, student characteristics, program descriptions and evaluations, student retention and progression, performance on the College-Level Academic Skills Test, faculty, relations with the state university system, and funding. Regarding vocational preparatory education, the study investigated organizational structure, entry-level testing, enrollment, student characteristics, delivery of instruction, remediation and retention, and funding. Major issues emerging from the study were state-level coordination, financing, placement in preparatory programs, completion of preparatory requirements, and postsecondary/secondary coordination. Recommendations developed to address these issues included the following: (1) the Division of Community Colleges (DCC) and the Division of Vocational, Adult, and Community Education (DVACE) should each conduct a program review of vocational preparatory programs by no later than 1992-93; (2) one comprehensive annual analysis should be prepared jointly by the DCC, DVACE, and the Division of Public Schools, in order to assist local and state decision makers in evaluating vocational program quality; (3) guidelines should be developed to link special program funds to improved completion rates by college preparatory students; and (4) the appropriateness of current placement examinations and minimum scores for college placement should be periodically assessed. Appendixes include Florida statutes and codes related to preparatory programs, course approvals and designated area vocational education schools, selected results from surveys of remedial program and vocational deans, and vocational and college preparatory cost analyses. (WJT)

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POSTSECONDARY EDUCATION PLANNING COMMISSION

AN ASSESSMENT OF COLLEGE AND VOCATIONAL PREPARATORY PROGRAMS

Prepared in Response to Specific Appropriation 587
of the
1989 General Appropriations Act
Chapter 89-253, Laws of Florida

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EXECUTIVE SUMMARY

In proviso language accompanying Specific Appropriations 587 of the 1989 General Appropriations Act, the Legislature directed the Postsecondary Education Planning Commission to undertake an assessment of the college and vocational preparatory programs in Florida's community colleges and at Florida A & M University. Proviso language further indicated that the assessment should include, but not be limited to:

> identifying the demographics, entry skill levels, the number of semesters in the program, the number of courses taken in a particular field, the number of different college preparatory courses, and rates of degree/certificate completion of program participants; identifying differences in program organization, delivery of instruction, and delivery of support services; identifying patterns of funding and expenditure for the program; identifying what happens to students after completing college preparatory courses; identifying an efficient and effective manner by which to collect specific information using the Community College Management Information System; identifying efficient and effective ways community colleges and Florida A & M University can work with school districts to use this data in curriculum/program planning, and other pertinent information.

The Chairman charged the Program Committee with responsibility for this study. Robert Kerrigan chaired the Committee; other members included Commissioners Thomas Heath, Donald Kahn, Tully Patrowicz, and Robert Stern. The Committee conducted eight meetings between September 1989 and April 1990. During these public meetings, the Committee discussed the information and documents collected, received public testimony, and reviewed material drafted for this report. The consultation process involved representatives of the Division of Universities, the Division of Community Colleges, the Division of Vocational, Adult and Community Education, the Office of Postsecondary Education Planning, Budgeting and Management, the Office of Postsecondary Education Coordination, legislative staff, college and vocational preparatory program staff, and institutional administrators from community colleges and Florida A & M University.

The study found that much progress has been made in understanding how the State's college and vocational preparatory programs function. Prior to 1985, preparatory or remedial program characteristics varied widely among the State's public colleges and universities. Since there was little attempt at consistency in such elements as program design, course curricula, entry or exit requirements, and data collection, any system-wide evaluation to understand the dynamics of the state's efforts in remedial education was highly difficult. Legislation enacted in 1984 and 1985 was designed to establish some order and consistency to remedial education in the public sector.

Florida statutes now mandate that preparatory instruction in public postsecondary institutions take place almost exclusively in community colleges and vocational/technical centers, although provision is made for state universities to offer preparatory courses under specific conditions. At

present, all 28 of the State's community colleges, 33 of the area vocational/technical centers, and Florida A & M University offer preparatory instruction. The remaining State universities enter into agreements with local community colleges whereby college preparatory instruction is provided by the community colleges for university students who do not achieve adequate scores on the entry examinations. The report's discussion of college and vocational preparatory programs in Florida community colleges and Florida A & M University includes the areas of organizational structure, state-level coordination, placement, enrollment, student characteristics, program description, services, and evaluation, student retention and progression, college preparatory instruction and the College Level Academic Skills Test (CLAST), and funding.

At the state level, college preparatory programs are coordinated by the Division of Community Colleges and the Division of Universities. College preparatory education focuses on remediating or developing computational and communication skills. Students are assessed prior to or upon entry to the institution and required to remediate deficiencies before progressing to college-level courses related to their deficient areas. Placement tests for this purpose are specified in rule with their accompanying minimum scores. Successful correction of diagnosed deficiencies is also obligatory. Institutionally, college preparatory instruction is predominantly found in the academic departments rather than in a unit organized and administered as a separate program. In the Community College System, approximately half of the students who have applied for a degree program have not met standards for college-level mathematics, and one-fourth have not met the standards for writing and reading. Some institutional research showed that less than half the students needing college preparatory coursework actually completed their prescribed courses.

Vocational preparatory education is mandated in statute as a function of vocational-technical centers. In addition to the State's 33 designated area vocational education schools administered by district school boards, 14 public community colleges administer area vocational education schools. State Board rule stipulates that students enrolled in a postsecondary adult vocational program of 450 clock hours or more must complete a basic skills examination within the first six weeks of admission to the program. Four examinations are designated in rule to assess student mastery of basic skills. Minimum basic skills grade levels in mathematics and language are defined in each vocational program. Students must be retested for exit with the same examination used for initial testing to determine successful correction of deficiencies. Responsibility for oversight at the state level of vocational preparatory education is shared by the Division of Community Colleges and the Division of Vocational, Adult and Community Education. The primary delivery system for vocational preparatory education in Florida is the Individualized Manpower Training System (IMTS), recently renamed the System for Applied Individualized Learning (SAIL). The proportion of students enrolled in qualifying programs and needing vocational preparatory instruction has varied among the community colleges and area centers. Nonetheless, the need for remediation has not diminished over the past five years. Data collected indicate that somewhat less than half of the students enrolled in qualifying programs in 1988-89 required remediation in the basic skills areas.

Based on the results of data collection and discussion, five major issues emerged relative to college and vocational preparatory programs in Florida: State-level coordination, financing, placement, completion of preparatory requirements, and postsecondary/secondary coordination. The study concluded that state-level coordination has consisted primarily of the collection and dissemination of entry-level testing data. A system-wide profile to capture the various facets of preparatory instruction and student progression trends is notably lacking. Although a complete program review for college and vocational preparatory is required in State Board of Education rule, none has been performed recently. A concern related specifically to coordination of college preparatory within the university system focused on the inadequacy of current statutory language defining the conditions under which a public university could offer college preparatory instruction.

Adequate data required to respond to Legislative proviso language for this study were scarce. Our expectations of college and vocational preparatory programs are very high, yet our understanding of the process based on aggregated information is very limited. Prior to 1989 in the Community College System, the kinds of information needed for informed program decisions at the local level and for policy decisions at the state level had not been available in a consistent, comparable manner. In addition to limited longitudinal data, the kinds of information compiled on a regular basis at the state level have been confined primarily to input or entry factors. The new Student Data Base developed by the Division of Community Colleges collects much more detailed information to develop individual student, program, and institutional profiles. In addition, however, to the critical steps of identifying and collecting the quantitative and qualitative information needed on preparatory programs, there must also be an analysis and interpretation of the information in order to evaluate program quality.

A second issue in this study was preparatory program financing. The State Board of Community Colleges estimates that the cost of instruction per full-time-equivalent (FTE) student in college preparatory is about twice as much as the cost per FTE student in traditional college courses. Cost data on vocational preparatory instruction in the Division of Community Colleges varied widely among the reporting colleges. Comparable cost data for school districts were not available.

Placement in preparatory programs was another major issue. Selecting the appropriate tests for placement purposes as well as the appropriate minimum scores are complex, difficult tasks yet critical components of preparatory programs. These decisions must be reviewed regularly. The study concluded that the level of doubt among practitioners and administrators concerning the kinds of placement tests currently used and the difficulty in establishing concordance among tests to set minimum scores was sufficient to warrant the consideration of alternative testing approaches.

The fourth issue involved the completion of preparatory requirements. Completion criteria for students in college and vocational preparatory instruction are specified in State Board rule. Interviews with college preparatory administrators revealed that many students withdraw from a preparatory class in which they have low grades in order to avoid having the course count against them under the existing three semester rule. The limited

data available also suggest that students are taking an inordinate amount of time to complete college preparatory requirements. With vocational preparatory, there was also the concern that students were leaving vocational programs before completing remediation requirements. A second problem in vocational preparatory programs was whether remediation should be required before program enrollment or before certain vocational courses could be taken. Program administrators were divided on this issue. Such requirements might have a chilling effect on enrollment, yet students who have much to remediate or students who are interested in high-tech programs may not be able to successfully complete their programs without prior remediation.

Finally, strong postsecondary/secondary coordination is central to achieve progress in the resolution of college and vocational preparatory issues. Meaningful communication must continue if educators and administrators are to understand and address student readiness. The study concluded that existing plans such as the revision of the postsecondary feedback report and expansion and availability of data bases to school districts would foster improved coordination. Nonetheless, additional local as well as state-level postsecondary/secondary initiatives are needed.

The Commission adopted the following recommendations to address the above issues:

Recommendations:

1. **The Division of Community Colleges and the Division of Universities should each conduct a program review of college preparatory programs no later than academic year 1992-93.** Those institutions within the State University System that do not directly offer college preparatory instruction should provide specific information concerning their contractual arrangements with the local community colleges in such areas as selection and supervision of faculty, preparation of course syllabi, selection of textbooks, and grading procedures.

2. **The Division of Community Colleges and the Division of Vocational, Adult and Community Education should each conduct a program review of vocational preparatory programs no later than academic year 1992-93.**

3. **In addition to the 5-year preparatory program reviews, the Division of Community Colleges and the Division of Universities should each compile an annual analysis on college preparatory education designed to assist local and state decision makers in evaluating program quality and conducting long-range planning.** Much of the quantitative information needed from the institutions has been incorporated into the institutions' respective student data bases. Descriptive information should also be collected, however, in a systematic, comparable manner and available in a common format for reference. Additionally, information relative to college preparatory programs should

identify enrollees on the basis of manner of entry, including those individuals who score above minimum levels but were referred into college preparatory instruction as well as those who self-select into preparatory courses.

4. **Under the direction of the Division of Vocational, Adult and Community Education, one comprehensive annual analysis should also be prepared jointly by the Division of Community Colleges, the Division of Vocational, Adult and Community Education, and the Division of Public Schools concerning vocational preparatory education to assist local and state decision makers in evaluating program quality.** This analysis should contain similar types of data as indicated above for college preparatory programs, including program enrollments, cost, funding, expenditures, and retention. This data should be used for both short- and long-range planning to provide direction for vocational preparatory education. A common format to collect and report this information should be developed and implemented by the 1991-92 reporting year. Care should be taken to assure that all students engaged in vocational preparatory instruction are accounted for, regardless of the delivery system, project, or program utilized in offering the instruction.

5. **Statutory language specifying conditions under which universities are allowed to offer college preparatory instruction should be revised so that authorization to offer preparatory programs is not contingent upon the percentage of in-coming community college students who require preparatory instruction.** An alternative approach could be to specify criteria that consider the percentage of incoming students at each university. For example, a university could offer preparatory instruction if 25 percent or more of its incoming students in Fall semester of the previous academic year scored below the minimum on placement tests.

6. **The State Board of Community Colleges should continue to review expenditures for college preparatory instruction and seek sufficient funds to address the identified need in this area.**

7. **In order to recognize and reward institutions for success in moving students through college preparatory instruction to completion of the associate degree, the State should develop guidelines for special program funds to be linked to improved completion rates by college preparatory students in academic programs leading to the award of an associate degree.** These guidelines should take into consideration such concerns as the number of preparatory courses required and the length of time taken in completing the preparatory coursework.

8. The Division of Vocational, Adult and Community Education in cooperation with the Division of Public Schools should

determine the cost of instruction per full-time-equivalent student for vocational preparatory programs in school districts. Based on this information, a special cost factor should be identified for vocational preparatory programs in the Florida Educational Finance Program (FEFP) appropriation. The weight established in FEFP for this program should be comparable to expenditures by community colleges or districts.

9. **The Department of Education should continue to periodically assess the appropriateness of current placement examinations as well as the minimum scores for placement in college-level instruction.** Consideration should be given to revising State Board of Education Rule 6A-10.0315 to identify minimum scores for only one placement test as the standard. The Articulation Coordinating Committee would then recommend and publish other authorized equivalent placement minimum scores in accordance with the single standard.

10. **The Department of Education should implement modifications to the high school assessment program which would address the utilization of an examination in high school for early diagnosis of students' computational and communication skills levels for college and the workplace.** This kind of testing initiative is needed as an early warning system to identify students' academically deficient areas and to provide students assistance in strengthening these essential skills prior to high school graduation.

11. **State Board Rule 6A-10.0315(7) should be revised such that the length of time a student has to complete all college preparatory requirements is based on four attempts or enrollments per discipline rather than on the number of semesters.** The four attempt recommendation relates to the traditional three-credit hour semester preparatory courses. Since some institutions use a modular approach where preparatory courses are less or more than three credit hours, rule would also need to specify an equivalency for such courses. Once a student has enrolled four times in a subject area (e.g., mathematics, reading, writing), the student is no longer eligible to enroll in that subject area again. Provision in rule for withdrawal for reasons of personal hardship or disability or under major extenuating circumstances would not be affected by the new four attempt rule.

12. **The Division of Community Colleges, the Division of Vocational, Adult and Community Education, and the Division of Public Schools should jointly identify the courses, programs, and conditions under which vocational preparatory students should demonstrate mastery of basic skills as a requisite for entry.**

13. The school districts should strengthen collaboration with the local community colleges and universities to identify necessary

curricular or other modifications that might improve student readiness for postsecondary education. For example, activities similar to faculty-to-faculty seminars between community college and university faculty would bring developmental educators together from high schools and community colleges to discuss curricular and data issues. If the Division of Public Schools has access to student readiness information through the Florida Information Resource Network, high schools may be able to collect valuable information on their graduates' performance on entry-level tests.

I. INTRODUCTION

Legislative Charge

In proviso language accompanying Specific Appropriations 587 of the 1989 General Appropriations Act, the Legislature directed the Postsecondary Education Planning Commission to undertake an assessment of the college and vocational preparatory programs in Florida's community colleges and at Florida A & M University. Proviso language further indicated that the assessment should include, but not be limited to:

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Prior to 1985, preparatory or remedial program characteristics varied widely among the State's public colleges and universities. Since there was little attempt at consistency in such elements as program design, course curricula, entry or exit requirements, and data collection, any system-wide evaluation to understand the dynamics of the state's efforts in remedial education was highly difficult. Legislation effective in 1984 and 1985 was designed to establish some order and consistency to remedial education in the public sector.

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present, all 28 of the State's community colleges, 33 of the area vocational/technical centers, and Florida A & M University offer preparatory instruction. The remaining State universities enter into agreements with local community colleges whereby preparatory instruction is provided by the colleges for university students who do not achieve adequate scores on the entry examinations.

Preparatory Education in Past Commission Reports

The State of Florida was among the first in the nation to legislate remedial education and place primary responsibility for offering college preparatory on the public community college system. Remedial instruction was first addressed by the Commission in the 1982 **Master Plan**. At that time, the Commission acknowledged that "the most logical and beneficial time for effective remediation is during the student's formative years in the K-12 system." It was also recognized, however, that postsecondary education institutions would need to continue offering remedial instruction as there was no consensus at that time on the nature and level of skills needed to begin college-level work. Assessment testing for placement purposes was identified as a necessary component of the college preparatory issue. The **Master Plan** enumerated a number of recommendations on remedial instruction. In a summary statement, the **Plan** stated:

> The Postsecondary Education Planning Commission believes that the responsibility for instruction in pre-college academic skills belongs in the K-12 sector, and the responsibility for remedial education in college-level academic skills belongs primarily in the community colleges. Remedial programs in universities should be limited to assistance for small groups of students with special needs. Until this goal is achieved, however, remedial education programs for all levels of skills are essential, should be provided in a rigorous and quality manner, and should be funded accordingly.

Subsequent legislation formalized most of the Commission's recommendations from the **Master Plan**. Section 233.051, Florida Statutes, directed that by August 1, 1990, programs of remediation primarily be the responsibility of the district school boards (Appendix A). For the postsecondary sector, Section 240.117, F.S., mandated that by June 30, 1984, the State Board of Education specify common placement tests and testing procedures to assess basic computation and communication skills of students entering degree programs at the State's public community colleges and universities. Prescribed scores for placement purposes have been adopted by the State Board of Education. The statute also permitted students in college preparatory programs to "take courses concurrently in other curriculum areas for which they are qualified while enrolled in college preparatory instruction courses."

In addition, this legislation allowed the state universities to contract with community colleges to provide remedial instruction on the university campus. State universities were permitted to offer college preparatory instruction until 1990 without contracting with a community college if "the percentage of incoming students requiring college preparatory instruction equals or exceeds the average percentage of such students for the community college system." The 1989 Legislature amended this last provision by deleting the 1990

limitation. Therefore, any university which meets the specified criteria will continue to be permitted to offer college preparatory instruction beyond this date.

Also, Section 233.051, F.S., (Appendix A) relative to remedial instruction as a responsibility of the secondary schools, was amended by the 1989 Legislature to exclude college preparatory instruction and vocational preparatory instruction. This will allow postsecondary institutions to continue to offer these programs.

Vocational preparatory instruction is addressed in Section 233.0695, F.S., (Appendix A) which specifies that each area vocational-technical center must provide such instruction. Guidelines for vocational preparatory programs appear in Rule 6A-10.040, Florida Administrative Code (FAC). Students enrolled in a postsecondary adult vocational program of 450 clock hours or more must complete a basic skills examination within the first six weeks of admission to the program. Students lacking required minimal levels of skills as measured by one of the designated examinations must be provided with instruction specifically designed to correct the deficiencies.

Because preparatory work should be related to student performance in subsequent college-level courses and the State's exit examination, the College Level Academic Skills Test (CLAST), other Commission studies in recent years concerning CLAST and undergraduate achievement contain references to issues involving preparatory education. Specifically, the Commission's 1988 report, **College Level Academic Skills Test Review**, emphasized the importance of early identification of potential postsecondary students with special academic needs and with high school records indicating they may be at risk of performing poorly in college. Placement testing for preparatory instruction is particularly needed with older students whose high school record may not be as useful in projecting academic performance in college. The **CLAST Review** report suggested that performance information from entry-level placement tests might assist in identifying students at-risk of not performing well on the CLAST. The report recommended that individual institutions track by sub-tests the performance of students on the entry-level placement tests.

In addition to supporting postsecondary preparatory education, the State has attempted to strengthen students' pre-college preparation. In 1986 the Legislature raised admissions standards to the State University System by requiring that high school graduates have a minimum B average and additional credits in English, mathematics, natural sciences, and social sciences. While many students know they are college bound, many others do not and so do not feel compelled to meet these higher standards. Also, students have avoided higher level courses, especially in mathematics, in favor of courses that do little to prepare them for college work.

A State-wide initiative that may improve the academic preparation of high school students and thus reduce the number of individuals requiring college preparatory instruction is the College Reach-Out Program. First authorized in the 1983 General Appropriations Act, this program had as one of its purposes to enhance access by strengthening the educational preparation of low-income or educationally disadvantaged high school students. The Department of Education sponsored a competitive grant process open to all public community

colleges and universities in Florida. A recent report prepared by the Florida State University Center for Policy Studies in Education concerning how participants benefitted from the program found that individual institutional programs tend to include supplemental academic instruction as a component. Programmatic activities included Saturday scholars programs to enhance academic abilities, time on-campus for college level type mini courses, preparing for entry tests, academic enrichment programs, and tutoring in math and reading. The report found little longitudinal data, however, on the impact of the program on participating students. Institutions did not have quantitative student follow-up data, thus making it impossible to assess the effect of Reach-Out on student preparedness for college. The 1989 Legislature established the program in statute and directed that institutions report more specific data in order to better identify the benefits gained by the participants and assess the success of the program. In particular, colleges and universities must report the student's academic performance following enrollment.

Beyond the above mentioned preparatory education components in past reports, little systematic study at the state level has been conducted on college and vocational preparatory instruction in the State's public college and universities since the Commission's **Master Plan** and the ensuing legislation and program development. Although Florida's college and vocational preparatory education has not been studied in depth, student preparedness, whether for postsecondary education or direct employment in the workforce, is an issue of great concern within education and industry. It has been estimated recently that more than three-quarters of this country's new employees through the year 2000 will have deficient verbal and writing skills. In response to industry and educational concerns with the increasing gap between emerging job requirements and the ability of Florida's workforce to meet them, the Commissioner of Education initiated the **Blueprint for Career Preparation**. The **Blueprint** is a comprehensive program to provide educators a framework for preparing youth and adults to successfully enter and remain in their chosen fields of work. A key strategy in the **Blueprint** calls for students to complete high school with the competence to continue on to postsecondary education and to enter the workforce. The **Blueprint** is being implemented over a six-year period between 1988-89 and 1993-94.

Other recent state-wide actions also illustrate the importance of student readiness. Two recommendations from the Governor's Education Summit Report (December 1989) call for a reduction in the number of high school graduates enrolled as first-time community college students requiring basic skills remediation. Also, the Commissioner of Education's Task Force Report on Assisting Minority Students in Meeting the Requirements of the College-Level Academic Skills Test (December 1989) contained recommendations for both K-12 and postsecondary sectors to ensure that students leave high school better prepared to perform college-level work. Within K-12, the report's recommendations center on curricula, testing, and student advisement. For the postsecondary sector, recommendations focus on intervention strategies for preparatory students as well as coordination with the K-12 sector concerning courses. The Task Force report also suggests the need for a high school test to assess readiness for college or employment and an assessment of entry-level placement test minimum scores.

An Historical Perspective of Remedial Education

Although many educators and other observers of remedial education cite the growing presence of pre-college courses on college and university campuses, historically, remedial instruction is not new to the nation's postsecondary institutions. Boylan (1986) traced the roots of developmental education to the early 19th century and the expansion of higher education to provide opportunities for the "common man." Confronted with a lack of qualified applicants and increasing competition from newly established colleges, institutions lowered admission standards. The ability to pay was a major criterion, and adequate academic preparation was secondary. To illustrate, the admissions criteria at Iowa State University in the 1850's "required only that students be able to read and write and be at least 14 years old" (Boylan, 1986). To compensate for weak academic preparation, colleges and universities in this era created preparatory departments to provide tutoring and special instruction to bring students up to par for college-level work. The University of Wisconsin housed one of the earliest preparatory departments in 1849.

During the 1920's, responsibility for remediation began to shift to the two-year institutions. By the mid-1960's, two-thirds of all college freshmen lacked college-level reading skills. Educators were also demanding that higher education provide access to everyone regardless of race or sex. As large numbers of underprepared students entered the higher education arena, educators and public officials noted falling admission scores, faculty discontent, and funding problems. In assessing these trends, many states re-adopted the position that high schools and community colleges were best suited for remedial instruction.

Remedial education had emerged as an identifiable entity by the 1970's. Donovan (1983) associates the development of preparatory programs in the 1960's with a combination of such factors as the civil rights movement and activist efforts by students and faculty to force colleges to open their doors. Other authors focus on the decline in student abilities as a condition necessitating remedial studies. In a discussion of compensatory education, Cohen and Brawer (1984) forwarded the following conditions to explain the growth in the numbers of underprepared students moving onto college campuses: the coming of age of the first generation reared on television; a breakdown in respect for authority and the professions; a pervasive attitude that the written word is not as important as it once was; the imposition of various other-than-academic expectations on the public schools; and a decline in academic requirements and expectations at all levels of schooling. The experience of the City University of New York (CUNY), composed of eight two-year and nine four-year colleges, illustrates what was beginning to occur throughout the United States by the early 1970's. Over a six-month period in 1970, CUNY's freshman class rose to 35,000 students--a 75 percent increase from the previous year (Donovan, 1985). As was typical at institutions moving to open admissions, the majority of these new students were underprepared and would not have been admitted under traditional university criteria.

Nationally, the proportion of postsecondary institutions offering developmental courses has grown rapidly. In 1971, less than 50 percent of higher education institutions offered remedial instruction (Davis, 1975). By

1984, approximately 82 percent of all institutions and 94 percent of public institutions offered some type of remedial assistance (U.S. Department of Education, 1985).

The impact of large numbers of academically underprepared students generated innovations while it also provoked frustration among college faculty and administrators. In many institutions, remedial or compensatory courses were developed and supported through counseling, assessment, and tutoring. For the most part, however, college administrators and faculty were as unprepared for these students as the students were for college work. As Donovan asserts, "Few community college faculty entered college teaching expecting to teach predominantly developmental courses, and as the implications of expanded access became clearer, the 'acceptance' of developmental education by many faculty became grudging and sometimes bittersweet." In one study, the authors found that faculty members were critical of the remedial program and the policy of awarding credit toward a degree (Richardson, Fisk, & Okun, 1983).

While communication and computational courses such as reading, writing, and mathematics are the major components of remedial programs, some of the sciences and computer literacy are also areas where students lack basic skills. Cohen and Brawer (1984) note that increasing numbers of students entering allied health programs with deficiencies in the sciences have resulted in more and varied remedial science courses. As computer literacy has become a requisite for most areas of study, students in college programs need minimal skills in the computer sciences. For many students, remediation in computer competency is obligatory.

Educators have differed on how best to administer remedial programs. Some institutions created new departments to handle remedial programs, while other institutions added these courses to existing departments or units. Some authors believe that remediation should be the responsibility of departments that offer advanced courses in those particular fields. They argue that when a special developmental studies department exists, the risk of discontinuities between remedial and advanced courses in the same field is greater (Richardson, Fisk, & Okun, 1983). Others are less convinced that inconsistency and poor articulation between remedial and advanced courses predominates (Rouche & Snow, 1977).

The Southern Regional Education Board (SREB) completed a study of remediation in its 15 member states in 1987. Selected results from that report are summarized here to provide a regional perspective to this report. The SREB study found that almost 83 percent of the responding institutions had written policies for the placement of students in remedial programs. The study identified seven organizational settings for remedial courses. Administering these programs through academic departments was most common. Assignment of students to remedial courses was most frequently done on the basis of mandatory assessment. Some states used state-wide standards while in other states institutions had complete discretion in establishing standards. Cut-off scores on placement examinations varied widely among institutions and states. Exit criteria to determine whether a student was ready to begin college-level work included completion of the course or program sequence, maintaining an established grade point average, and passing selected skills tests. Finally, program evaluation was examined. Among the SREB states, 58.4

percent of responding institutions reported follow-up studies on a regular basis of students completing remedial/developmental activities. However, when institutions were asked to compare the graduation rates of students who had completed remediation and non-remedial students, 66.1 percent of respondents had no basis on which to make this determination. This study clearly revealed the tremendous diversity both within and among states in managing remedial education. SREB is currently conducting another comprehensive examination of these programs; a final report will be available by mid 1990.

Conclusion

Florida has achieved considerable progress towards student readiness as a result of the college and vocational preparatory programs. Yet, the reality that developmental education will not soon move off college campuses has generally settled into higher education. There is little evidence nationally or in Florida to indicate that raising high school standards will greatly affect the number of recent high school graduates underprepared for college-level work. Florida now requires entry-level testing to determine if students are prepared to perform college-level work. Those students whose placement test scores indicate that they cannot do college-level work are referred to college or vocational preparatory courses to remediate or develop the competencies they need to succeed in public community colleges and universities. The cost of teaching these basic communication and computation skills is high. Current public policy in Florida endorses expenditures for this repetition of educational effort. But questions of how much is sufficient and what accountability is needed to justify continued support from public funds are among the many concerns surrounding preparatory education in Florida public institutions. The following chapters synthesize information concerning college and vocational preparatory programs in Florida's public community colleges and Florida A & M University. Finally, related issues are discussed and recommendations presented in Chapter IV.

II. COLLEGE PREPARATORY EDUCATION IN FLORIDA PUBLIC INSTITUTIONS

College preparatory education focuses on remediating or developing computational and communication skills. Preparatory courses are defined in rule as those identified by the State universities and community colleges as necessary in order for a student to acquire the skills and knowledge to perform successfully in college-level courses (6A-20.001(11), FAC). Students are assessed prior to or upon entry to the institution and required to remediate deficiencies before progressing to college-level courses related to their deficient areas.

Unlike some states where remediation is optional, successful correction of diagnosed deficiencies is obligatory in Florida. Rules governing completion of competency-based college preparatory instruction provide guidelines for certification of competence:

- Successful completion of courses in which the competencies specified in Rule 6A-10.033(1)(c)1, FAC are taught;
- Passing a criterion-referenced assessment which tests the competencies specified in the above Rule;
- Achieving the scores in Rule on the tests listed, or the comparable scores on a validated, analogous norm-referenced test(s).

In most of Florida's community colleges, the exit test is different from the placement test. The majority use an institutionally or locally developed instrument to determine competency for course exit. A few colleges use a standardized test for exit.

This chapter examines many facets of college preparatory programs, including organizational structures, state-level coordination, placement, enrollment, student characteristics, programs, retention, CLAST performance, faculty, and funding. Data were collected from diverse sources and compiled to present as complete a profile as possible of college preparatory programs in the State. Information was requested from the State Board of Community Colleges and from individual institutions. Site visits and public testimony during Committee meetings supplemented the information base. Also, selected results from a Southern Regional Education Board survey on remedial education were incorporated (Appendix C).

Organizational Structure

As noted in an earlier section reviewing the historical development of remediation, current organizational preferences for preparatory programs in postsecondary institutions represent two options. One organizational approach is to house the preparatory programs within their respective academic departments. The second organizational approach is to create a separate entity, often under student support services, responsible for both communication and computational preparatory courses. While both approaches are found in Florida's community colleges, the academic department approach predominates. Proponents cite such advantages as better control over the curricula, integration of regular faculty to teach the courses, and less

isolation of these students from the mainstream of college courses. Those faculty and administrators who favor the separate program approach point out that the preparatory program makes more efficient use of resources, benefits more from categorical funding targeted for preparatory instruction, utilizes faculty who want to teach developmental students, and focuses on individualized student needs.

State-Level Coordination

Most mechanisms in place to coordinate and monitor college preparatory education from the State level respond to requirements stipulated in statute or in rule. One of the reporting requirements for college preparatory instruction involves feedback information from postsecondary to secondary institutions. Section 240.118, F.S., requires public postsecondary institutions to report to each school district on the performance of the students from that school district who are enrolled at the state university or public community college. A recent rule revision (6A-10.038, FAC) enumerates specific student information to be reported by institutions. Statute also requires the State Board of Education (SBE) to report annually to the Legislature on the number of Florida high school graduates, by high school, referred to remediation programs.

A second reporting responsibility involving college preparatory programs is the program review process. Florida statutes require public community colleges and universities to review every major program every five years or whenever the effectiveness or efficiency of a program is jeopardized. The indicators of quality and criteria for the program reviews are defined by the Division of Universities and the Division of Community Colleges. Results of these program reviews are to be tied to each system's budget request. The Division of Universities last reviewed remedial programs in the late 1970s.

The State Board of Community Colleges has considered remediation as an output indicator in reporting the colleges' progress toward educational excellence. Originally, the Community College System's annual report to the SBE listed the percent of students who complete preparatory instruction and then continued to receive degrees or certificates. Only degree or certificate seeking students were tracked. To be deemed successful, a student must have received the degree or certificate within two years of completing the preparatory courses. Although this information was helpful, it did not reflect the number of students taking longer than two years to complete the degree or certificate nor did it include data from all of the 28 community colleges. These data were discontinued as indicators in 1989. Current indicators of excellence report CLAST pass rates for students who received college preparatory instruction and those who do not receive such instruction. With the implementation of the Division of Community Colleges' Student Data Base, the Division will be able to monitor progress and completion on an individual student basis.

Placement

For the most part, students are assigned to college preparatory courses based on their performance on placement examinations. Currently, colleges and universities may use any of four placement tests. Effective Fall 1985,

Rule 6A-10.0315 authorized the use of the American College Testing program's ACT Assessment and ASSET as well as the College Entrance Examination Board's SAT and MAPS as placement examinations for preparatory education. Rule also prescribed minimum scores for each test (Appendix B). In 1987-88, 79,326 first-time-in-college students were tested for placement. All community colleges as well as Florida A & M University administer more than one of the four types of placement tests. In 1987-88, 23 community colleges offered the ACT, 23 offered the SAT, seven offered ASSET, and 21 offered MAPS. Among the State universities, the decision to refer students was made using either the ACT or the SAT. On each of the four recognized tests, communication and computation abilities are assessed through three subtests: reading, writing, and mathematics. Students scoring below the established minimum scores in any subtest are required to successfully complete preparatory courses for those areas or otherwise demonstrate competency before enrolling in college-level courses. In 1988-89 among all students tested in the Community College System, 48 percent of the students scored below minimum standard in mathematics, 24 percent scored below in reading, and 26 percent scored below in writing. These percentages showed a slight decrease when compared to the previous two years' percentages in the subtest areas.

TABLE 1

COLLEGE PREPARATORY PLACEMENT TESTING RESULTS FOR ALL STUDENTS NUMBER AND PERCENT OF SCORES BELOW STANDARD 1986-87 TO 1988-89

	MATHEMATICS		READING		WRITING	
	NUMBER	%	NUMBER	%	NUMBER	%
1986-87	33,329	51%	18,631	27%	19,888	30%
1987-88	31,416	50%	15,858	25%	17,392	28%
1988-89	32,573	48%	16,669	24%	17,454	26%

Source: State Board of Community Colleges, 1990.

Placement is a key element in preparatory education. Earlier in this decade, standardizing placement criteria through the identification of four tests and their minimum scores was a controversial process. In 1985, in response to growing concern with the adequacy of minimum scores as well as with the tests themselves, the Commissioner of Education created an Inter-Sector Task Force on Placement Test Cut-Off Scores. This group was charged with developing recommendations on the effectiveness of entry-level testing policies and on changes if needed. In 1989, the Task Force submitted recommendations to maintain the cut-off scores at their existing levels. Part of the rationale for this decision rested in the rule itself. Rule 6A-10.0315 expressly notes that any student may be referred to preparatory coursework:

> Nothing provided in Rule 6A-10.0315(1), FAC, shall be construed to prevent the enrollment of a student in college preparatory instruction if the community college or university determines that such enrollment would enhance the student's opportunity for future academic success. The determination of enrollment would be made after counseling with the student and the analysis and consideration of other assessment techniques and measurements...

As a result of the flexibility in placing students who score above the prescribed minimum levels on the placement tests, preparatory course enrollments are augmented by referrals from institutional faculty and staff. Nonetheless, the prescribed minimum score levels remain controversial. During site visits for this study and in related work for the Inter-Sector Task Force, faculty teaching in the community colleges in preparatory as well as college-level courses have indicated that the scores are too low. Consequently, students who marginally pass the entry-level cut-off points enter college-level courses but are unable to perform adequately. In an effort to reach concordance among tests for the various subtests, the Department of Education Articulation Coordinating Committee has evaluated the test minimum scores and recommended modifications in rule based on concordance analyses.

The amended rule proposed by the Department of Education would also allow the use of Computerized Placement Testing (CPT) as an assessment tool for entry-level placement. Developed by the College Board, CPT is a testing program based on computerized adaptive testing, which utilizes microcomputers to adapt examinations to individual students. The computer selects questions based on the student's performance as the test proceeds. Thus, the student's skill level is established as the test progresses. The CPTs consist of four untimed placement tests that cover reading comprehension, sentence skills, arithmetic, and algebra. CPT has been pilot tested at Miami-Dade Community College and Santa Fe Community College since 1986 under a project sponsored by the League for Innovation and International Business Machines. Student reaction has been enthusiastic. A concordance experimental study was implemented in 1988 to establish appropriate minimum scores for the CPTs. Wide-spread use of CPT is currently limited by insufficient hardware and software in most institutions.

Another concern related to placement in preparatory instruction has centered on the appropriateness of the examinations currently used for placement purposes. Placement testing responds to the need to locate a student in a learning situation which will best utilize the resources of the student and the institution. The great diversity of academic abilities in Florida's community college and university students exacerbates the task of placing students at the correct level for postsecondary education. In reviewing existing placement testing policies and procedures, a continuing issue is the importance of distinguishing between admissions tests such as the ACT and SAT which are properly used for screening students and placement tests whose purpose is to aid in student course placement.

Enrollment

Enrollment data from the Division of Community Colleges show that the number of FTE students systemwide in college preparatory programs increased annually

between 1985 and 1988. Total FTE in college preparatory was 7,390.7 in 1985 and rose to an estimated 10,046.0 during the four-year period. Among institutions responding to the recent SREB study, between 50 and 70 percent of the first-time full-time freshmen enrollees were in remedial courses. By subtest, trends in mathematics remediation indicated an increase in enrollments at a majority of the colleges. At approximately half of the colleges, enrollments had increased in reading in writing. This suggests that students entering in 1989 were somewhat better prepared in reading and writing than students entering in 1984. The situation with mathematics, however, is far less encouraging as enrollments for mathematics remediation increased over the five-year period at most of the institutions.

The proportion of students needing mathematics remediation generally exceeds both the reading and writing proportions. For academic year 1987-88, the Community College System reported that approximately half of the students who applied to enter degree programs did not meet the State Board of Education standards for mathematics and one fourth did not meet the standards for writing or reading. According to the SREB survey, in most colleges in 1988-89 approximately three-fourths of the students required remediation in mathematics, while approximately 39 percent of the institutions reported from one-fourth to one-half of their students needing mathematics remediation, and another 39 percent of the colleges found that from one-half to three-quarters of their students needed mathematics remediation. Reading and writing remediation were needed by one-fourth or less of the students at half of the colleges with the remaining half of the institutions indicating that 25 to 50 percent of their students needed reading and writing remediation.

Enrollment figures, however, may not adequately reflect student demand or need for this instruction. Institutions limited by human, physical, and fiscal resources may not be serving all of their college preparatory students. For example, information contained in the 1989 report on placement testing prepared by the Office of Postsecondary Education Planning, Budgeting and Management for the State Board of Education indicates that the number of first-time-in-college (FTIC) students in community colleges referred to college preparatory instruction did not approach the numbers of students scoring below the subtest minimum scores. To illustrate, at one institution 1,140 FTIC students were tested and 297 students were referred, yet 953 scored below standard on math, 677 scored below on reading, and 543 scored below on writing. Also, some students may defer enrolling in non-credit preparatory courses during their first semester or even their first year of study.

Student Characteristics

The student population in college preparatory programs tends to be highly diverse. In addition to new Florida high school graduates, community colleges, in particular, serve other individuals who need preparatory education. For example, a large segment of the returning adults require remediation. Non-native English speakers or limited English proficient individuals form another large group of students in the community colleges who usually qualify for preparatory education.

Data to examine enrolled students by characteristics such as gender, age, race/ethnicity, program of study, and attendance status were limited or not

available at the State level. Such data were also usually not reported by institutions on the SREB study. The following generalizations concerning gender and race/ethnicity are made with caution. More females than males take the entry-level tests, and in most of the colleges, the number of females enrolled in remedial programs surpass the number of males enrolled. It should be noted that in most of these colleges also the total first-time full-time freshman headcount enrollment included more women than men.

The Division of Community Colleges reported that in 1987-88, approximately 64,000 persons took entry-level tests. By race/ethnicity, 75 percent were white, 10 percent were black, 10 percent were Hispanic, and five percent were "other." Only seven of the 21 colleges responding to the SREB survey submitted data showing the distribution by race/ethnicity of students enrolled in remedial courses. When comparing the proportional distribution of white, black, and Hispanic students in the total first-time full-time freshman enrollment with their distribution in remedial enrollment, no distinguishable pattern emerges. At most of the five institutions reporting sufficient data on which to base a comparison, the percentage of black and Hispanic students in remedial programs was within three points of the percentage of first-time full-time black and Hispanic freshmen enrolled in the institution. In all five colleges, the proportional percentage of white students enrolled in remedial courses was lower than the proportional percentage of first-time full-time white freshmen in the institution. Table 2 displays students' performance by subtest and race/ethnicity in 1987-88 and 1988-89. Among all white test takers, between 20 and 25 percent scored below standards in reading and writing, while about 50 percent scored below in mathematics. Among blacks, approximately 60 percent scored below standard in reading and writing and 70 percent were below in mathematics. Among Hispanic test takers, about 40 percent did not meet standards in reading and writing and 55 percent scored below minimum in mathematics.

TABLE 2

PERCENT OF ENTRY-LEVEL TEST TAKERS SCORING AT OR BELOW MINIMUM SCORES BY SUBTEST AND RACE/ETHNICITY 1987-88 AND 1988-89

1987-88

	READING	WRITING	MATH
Whites	21.3	25.0	52.4
Blacks	62.0	60.0	71.2
Hispanics	41.0	40.9	55.9

1988-89

	READING	WRITING	MATH
Whites	21.2	23.6	50.4
Blacks	61.0	57.7	69.5
Hispanics	43.1	39.1	54.6

Source: Postsecondary Education Policy Unit; Planning, Budgeting, and Management, 1990

Program Description, Services, and Evaluation

Specific courses identified as college preparatory are listed in the State's Common Course Numbering System. The annual general appropriations act requires that college preparatory courses be entered in the system and approved by the State Board of Community Colleges. The list of such courses approved for 1989-90 includes 45 with English Composition (ENC) prefixes, 26 with English as a Second Language (ESL) prefixes, eight with Industrial Education-Applied (IEA) prefixes, 15 with mathematics prefixes, seven with Mathematics-Technical and Business (MTB) prefixes, 18 with reading prefixes, and eight with vocational preparatory instruction (VPI) prefixes (Appendix E). Colleges offer the major portion of preparatory courses during regular Fall and Spring terms. Few institutions have college preparatory summer programs available to students.

Academic support services to supplement basic skills coursework vary among colleges. The SREB survey asked the colleges to indicate which of the following support services were offered and to rate the effectiveness of each on a scale from "not very effective" to "very effective": peer tutoring, faculty tutoring, additional diagnostic testing, counseling, assistance labs/learning centers for reading writing, and/or math, and other. Peer tutoring was provided by 16 (76%) of the 21 responding institutions. Two of the colleges rated their peer tutoring as very effective, and six (38%) rated this service as effective. Faculty tutoring was somewhat less common among the colleges, with slightly more than half (57%) providing this kind of service for college preparatory students. Although three colleges rated this service as very effective, most of the remaining institutions indicated that faculty tutoring on their campuses was generally average or only somewhat effective. Additional diagnostic testing was conducted by most of the colleges (86%) and was generally rated as effective or very effective. Counseling was also extensively used, with only two colleges indicating that this service was not available to students in remedial courses. Ratings for this service ranged almost equally among average, effective, and very effective. Assistance laboratories and learning centers were also very popular and offered by all but one of the colleges. These services were ranked highly by the majority of the colleges.

In sum, support services were widely used by the responding institutions although there was great variation in their effectiveness as perceived by the colleges. The most widely used services were counseling and learning laboratories or centers. The latter type of service was generally judged to be the most effective. The service used by the fewest number of colleges was faculty tutoring, and the level of effectiveness was average to less effective.

Evaluation is an important element in academic activities. Colleges were asked on the SREB survey to indicate the types and frequency of evaluation conducted for five remedial activities. The frequency of evaluation activities reported varied from each semester to quarterly, annually, biennially, or other. Student evaluation of individual courses or the overall preparatory program was reported by 86 percent of the responding colleges. Instructor evaluation of courses or programs was somewhat less widespread, with 14 colleges (67%) conducting this kind of evaluation activity. Sixteen institutions reported an evaluation of completion rates of remedial courses or the remedial program. Also, twelve colleges indicated that follow-up studies of the academic performance of students completing remedial coursework were done by semester, annually, or using another frequency. Finally, as an evaluative tool, studies of course or program effectiveness were conducted by 15 colleges (71%).

Evaluation was also measured by the survey through a request for data on remedial course and program completion rates. Colleges reported the percentage of students enrolled in remedial programs who successfully completed their academic programs and the percentage of students enrolled in remedial courses who completed these courses in the areas of reading, writing, and mathematics. The percentage of students who completed their academic programs ranged from five percent to 92 percent across the 21 colleges. Fewer than 25 percent completed at five colleges, from 26 to 50 percent completed at six colleges, from 51 to 75 percent completed at seven colleges, and over 75 percent completed at one college. By preparatory subject area, the distribution of successful completion rates was quite similar. A 26 to 50 percent completion rate was given by six colleges for reading, eight colleges for writing, and ten colleges for mathematics. A 51 to 75 percent completion rate was indicated by ten colleges for reading, ten for writing, and eight for mathematics.

When comparing responses on the above two items, in many cases the academic program completion rates of students in remedial activities were lower, often much lower, than completion rates for the specific course areas (reading, writing, mathematics). This situation raises a number of questions. Are the remedial courses preparing students for college-level work or are the students still unable to perform college-level work and drop out of the institution before program completion? Are remedial programs designed around student needs or institutional needs or both? Do students in remedial courses grow dependent on other services such as tutoring and counseling that are not available when they enroll in college courses? Do students spend so much time in remediation that they succumb to "burnout" when they finally move into college-level courses? Are large numbers of students seeking admission to college who really are not motivated to invest the additional time, money, and energy required to move through remedial as well as college-level coursework?

Student Retention and Progression

Data on student retention and progression from preparatory courses through basic courses and on to program completion are critical in program assessment. For example, as part of its summative review of associate of arts (A.A.) degree programs in academic year 1989-90, the Division of Community Colleges collected institutional data showing the progress of FTIC A.A. degree seeking students. The Division found that of the 20,608 FTIC A.A. degree seeking students enrolled in college preparatory instruction in 1985-86 at 23 reporting colleges, approximately 10 percent had graduated by the end of 1987-88. Also, 32 percent had not graduated by the end of 1987-88, but they were still enrolled in college. Finally, 58 percent of these A.A. students had not graduated nor were they enrolled in 1987-88. Although these data refer only to part of the total incoming student group, they do reveal progression characteristics of some college preparatory students.

Generally, data on student retention were very limited or, in many institutions, nonexistent according to the SREB survey. Only three of the 21 responding colleges maintained records to determine the average percent of students retained to their second year who took at least one remedial course as an entering freshman. A few Florida colleges have examined retention and progression data for college preparatory students. Relevant studies are summarized below.

Many factors influence students' abilities to progress successfully through college preparatory work and into college-level courses. An important factor is the number of preparatory subject areas requiring completion. Research conducted at Miami-Dade Community College (M-DCC) and Broward Community College (BCC) revealed that the more college preparatory or remedial work students need, the less likely they are to persist and ultimately graduate (Broward Community College, RR89-14, 1989; Losak, 1983; Losak, 1986). Nonetheless, students who successfully completed college preparatory work in all of the areas in which they were underprepared had persistence rates comparable to those for students who began with no skill deficiencies (Broward Community College, RR89-14, 1989; Losak & Morris, 1985). The persistence rate was systematically lower as fewer needed college preparatory classes were completed. Most disturbing, however, is that research at both Miami-Dade and Broward revealed that less than half the students needing preparatory coursework actually complete their prescribed courses. Miami-Dade found that after three years only 15 percent of the academically underprepared full-time students enrolled in 1982 had graduated.

State Board rule limits students to no more than three semesters in each skill area to complete college preparatory instruction. However, students who withdraw officially before the midpoint of a semester may be considered to have not enrolled that semester for purposes of this limitation. Exceptions are allowed, including students enrolled in English as a second language courses.

Once students complete preparatory work, they should be ready to begin college-level courses. Evidence suggests that preparatory students continue to experience great difficulty with college-level courses. Broward conducted a study to determine whether college preparatory students were ultimately

successful in certain college-level courses (Research Report 88-20). Overall, the findings suggested that students who did well in their college preparatory classes tended to do satisfactorily in the respective college-level courses. Passing preparatory courses with average grades was not enough to prepare students for college-level work. The study found that large proportions of students who enrolled in preparatory courses had not yet enrolled--after three academic years--in college-level courses.

College Preparatory Instruction and CLAST

Entry-level testing measuring student readiness and exit-level testing through the College Level Academic Skills Test (CLAST) are important components of Florida's postsecondary education assessment process. It is assumed that a relationship exists between the competencies needed to enter a public college or university and those that students should have mastered before leaving the institution with an associate of arts degree or advancing into upper division coursework. It is anticipated that students who do not perform at the accepted level on entry examinations would not be able to pass the CLAST without demonstrating mastery of pre-college skills through successful completion of preparatory coursework. It is also assumed that those students who need pre-college courses and complete them should be better equipped to pass the CLAST.

Given the investment of resources in college preparatory education, students who enrolled in preparatory courses should be tracked to determine if they sat for the CLAST and, if they did, how they performed. The Division of Community Colleges now produces some of these data in its annual report of progress toward educational excellence. This report contains two indicators that relate college preparatory and CLAST through the percent of community college students who receive college preparatory instruction or do not receive preparatory instruction, take CLAST, and pass each subtest. For 1988-89, the results ranged widely across the colleges. In general, students who received college preparatory instruction had lower pass rates than students who had not received such instruction. Although this type of follow-up has been limited at the State level in the past, the Division of Community Colleges will be able to generate retention and follow-up data through the new Student Data Base which began full implementation in Fall 1989. The Department of Education's Articulation Coordinating Committee will also be examining the relationship between college preparatory and CLAST, particularly the correlation in student performance on college entry and exit. Only a few colleges have invested resources in developing institutional research units with sufficient data bases to perform the analyses needed in college preparatory follow-up. Miami-Dade Community College, Broward Community College, and Santa Fe Community College have conducted studies of their student populations which provide insights on college preparatory students' performance during and following preparatory coursework.

As the Division data illustrate, students who required preparatory courses generally have had a lower CLAST pass rate as a group than students who did not need college preparatory work. A Miami-Dade study concluded that students who completed needed college preparatory work had higher CLAST passing rates than those who needed preparatory courses but did not complete them (Losak & Morris, 1985). However, preparatory students had lower passing rates than

students who entered with no deficiencies. Broward Community College examined these cohorts for the academic year 1988-89 and found that 87 percent of the examinees who did not have college preparatory experience passed all four subtests of the CLAST, while 68 percent of those who had taken preparatory coursework succeeded in passing all four subtests (Research Report 89-23).

Faculty

Data relative to faculty teaching remedial courses were obtained from the SREB survey and included a headcount breakdown by employment status (full-time or part-time), teaching basis (hired specifically for remedial teaching, assigned to remedial teaching, or volunteered for remedial teaching), and highest academic preparation (doctoral, master's, or bachelor's degree). Additional survey items covered training for remedial instructors. Some of these data are summarized here (see Table 3, Appendix C).

The actual headcount number of faculty teaching at least one remedial course varied from a low of three to a high of 277 in the 21 Florida community colleges that reported faculty data to SREB. The proportional distribution between faculty working full time and those working part time was often 50/50. In many cases, a larger proportion of individuals worked under part-time employment than under full-time employment, especially in colleges with more than 20 faculty teaching remedial courses. In colleges with fewer than 20 faculty members assigned to remedial courses, the tendency was for more of these individuals to be employed full time than part time. Colleges were also asked to indicate if these faculty were specifically hired to teach the remedial courses, if they were assigned, or if they volunteered. Seven institutions reported that at least one faculty person volunteered to teach in the remedial program. In a few colleges, a large percentage of the faculty were involved with remedial teaching because they volunteered to do so. All but three of the responding institutions hired faculty specifically for remedial courses, and all but four colleges indicated that at least one faculty member was assigned either on a required or a rotating basis to teach remedial courses. Faculty teaching in remedial programs represented bachelor's, master's, and doctoral degree preparations at most colleges, with the majority of faculty holding master's degrees. Although a few colleges employed only instructors with master's or doctoral degrees for remedial courses, other colleges relied much more on bachelor's prepared instructors. Few institutions reported that more than half of their remedial instructors received training specific to remediation prior to actually teaching in their remedial programs. In addition, approximately two-thirds of the institutions reported that on-going training for remedial faculty was not available.

The State University System

Statute sets specific conditions under which public universities may provide preparatory instruction (Appendix A). Only Florida A & M University has met those conditions in the past. The remaining eight state universities contract with local community colleges to provide preparatory instruction. In most instances, the preparatory courses are offered on the university campus for the convenience of the student although the student registers at the community college and is counted for funding purposes at the college. Faculty teaching the preparatory courses, course syllabi, exit examinations, and so on may be

controlled by the university. In some cases, community colleges have no control over and little input into preparatory programs under contract with the universities.

Among the nine State universities, the Board of Regents monitors preparatory education through Entry-Level Testing/College Preparatory Program Reports each semester. The number of FTIC students who scored below minimum levels in 1988-89 was higher in all subtest areas than in 1987-88. For the SUS overall, 8.46 percent or 1,362 unduplicated headcount FTIC students scored below minimum; 625 students did not qualify in reading, 547 did not qualify in writing, and 899 did not qualify in mathematics. In each subject area in 1987-88, approximately half of the preparatory students enrolled in a college preparatory course. "Other Reasons" for not taking a preparatory course were listed by institution and included: (a) did not take any course in that subject area, (b) did not follow advisement and enrolled in college-level course, (c) reason unknown, (d) withdrawn, or (e) will take next semester.

The Board of Regents also requires the universities to identify students admitted under "alternative admissions," which includes all individuals admitted as FTIC undergraduate students who do not meet the State University System's minimum admissions standards (Rule 6C-6.002, FAC). Information on these students is reported annually to the BOR in follow-up reports. Institutions must prepare Individual Learning Plans (ILPs) for these students.

At Florida A & M University, college preparatory courses are administered through the College of General Studies. As in the community colleges, students who score below the minimum levels in reading, writing, or mathematics are referred to preparatory courses. In 1988-89, 47.46 percent of FAMU's enrolled FTIC students required at least one preparatory course. Table 3 displays data for three academic years showing the number of FTIC students scoring below minimum scores on entry tests. During the three-year period, the number of FTIC students increased steadily. Between 1986 and 1988, both the number and the proportion of students requiring preparatory instruction in each subject area decreased--a recognition of the University's success in attracting better-prepared students.

FAMU makes extensive use of the Student Academic Support System (SASS) in tracking preparatory students. SASS is a single system for each of the nine state universities which provides, among other things, support for the development of a student-specific academic program and helps integrate the student's program and planning for appropriate courses. Consequently, accurate information is available concerning the student's academic status and needs. Students enrolled in preparatory courses have access to a variety of support services. An academic support center funded in part by a federal grant and by Operation Student Concern, a state-supported program, are among the services open to preparatory students. Group and one-on-one tutorial activities are utilized. FAMU estimated that 80 percent of the students who required remediation are retained to their second year and approximately 75 percent of preparatory students successfully complete their program of studies.

TABLE 3

FIRST-TIME-IN-COLLEGE STUDENTS WHO SCORED BELOW MINIMUM SCORES ON ENTRY LEVEL TESTING AT FLORIDA A & M UNIVERSITY, 1986-87 TO 1988-89

	NUMBER	PREP SUBJECT					
	ENROLLED AS	READING		WRITING		MATH	
YEAR	FTIC STUDENTS	No.	%	No.	%	No.	%
1986-87	1,200*	500	41.7	465	38.8	660	55.0
1987-88	1,388	303	21.8	221	15.9	393	28.3
1988-89	1,690	363	21.5	362	21.4	592	35.0

* Summer enrollment estimated by FAMU Office of the Registrar.

Source: State University System annual reports on the Entry-Level Testing/College Preparatory Program, 1987, 1988, 1989.

Successful completion of a preparatory course is determined by a satisfactory score on the appropriate MAPS Test. In 1987-88, less than 40 percent of those students in each subject area who required preparatory course actually enrolled in the respective college preparatory course. Many passed a criterion-referenced assessment test or a validated analogous norm-referenced test. The remainder were part-time students or did not enroll for other reasons. FAMU has tracked college preparatory students who have taken the CLAST after accumulating 60 hours or more. Of the 430 students who tested at entry into preparatory courses between 1984 and 1989, 74 percent had passed all four subtests of the CLAST, 17 percent passed three subtests, and nine percent passed two or fewer. On the individual subtests, pass rates for preparatory students ranged from 85 percent in mathematics to 95 percent in English language skills.

The 13 faculty members teaching college preparatory courses are primarily full-time faculty who have been assigned to preparatory classes. The highest academic preparation for most of the faculty (10 individuals) is a master's degree; three hold doctorates. None of these instructors received training in developmental education prior to their teaching assignments in college preparatory. FAMU provides some on-going training opportunities.

Funding

The colleges expend approximately $30 million annually for preparatory education from the Community College Program Fund. Remedial programs are funded almost exclusively by general operating funds rather than categorical funding. Few colleges supplement preparatory programs with funds generated by special grants and contracts. The Division of Community Colleges estimates

that statewide approximately 10 percent of preparatory funds come from federal support, 20 to 25 percent of preparatory funding is provided by student fees, and the remainder are State funds. Preparatory funding is determined in part by the previous year's expenditures. Consequently, while colleges may encourage and allow students to participate in preparatory instruction, institutions that exceed their funding provisions must bear the burden of the additional cost. In its 1990-91 budget request, the State Board of Community Colleges estimated that the cost of instruction per FTE for college preparatory was about twice as much as instruction for traditional college courses. An additional $3.3 million has been included in the budget request to fully fund the estimated need in this area from a total request of $34.6 million.

The 1989 General Appropriations Act directed that $6 million from the Community College Program Fund be utilized for enhancement of preparatory classes. In October 1989, the Division of Community Colleges requested reports from each college explaining the objective of the program enhancement initiative, a description of the initiative, and the cost and number of any new positions. Almost all colleges had allocated the enhancement funds at least partially for new positions for instructional faculty and purchase of new supplies or equipment. Other funding uses included salary increases, facilities and equipment renovations, curricular improvements, and staff development activities.

Cost data reported by the Division of Community Colleges indicate the total cost per FTE student in college preparatory programs (Appendix H). The report shows great variation by institution in these data. In 1987-88, for example, the total instructional cost per FTE ranged from $562.62 to $3,194.70. The average cost among all colleges was $1,285.98.

Florida A & M University also covers preparatory instruction costs from its general operating budget. For academic years 1985-86 and 1986-87 the University received $500,000 for its Basic Academic Skills Enhancement (BASE) program, which was a forerunner of the current preparatory program. With these initial monies, the institution hired faculty, established learning laboratories, enhanced existing laboratories, purchased equipment and supplies, participated in faculty professional development conferences related to developmental education, and hired counselors and advisors. FAMU has not calculated the cost of instruction for its preparatory program.

III. VOCATIONAL PREPARATORY EDUCATION IN FLORIDA

Vocational preparatory education is mandated in statute as a function of vocational-technical centers. The State has 33 designated area vocational education schools administered by district school boards. In addition, 14 public community colleges administer area vocational education schools (Appendix E). State Board rule stipulates that students enrolled in a postsecondary adult vocational program of 450 clock hours or more must complete a basic skills examination within the first six weeks of admission to the program (6A-10.040, FAC) (Appendix B). Four examinations are designated in rule to assess student mastery of basic skills. Students who do not meet the required minimal level of basic skills must receive instruction specifically designed to correct identified deficiencies. Minimum basic skills grade levels in mathematics and language are defined in each vocational program description adopted under State Board rule and published annually by the Commissioner of Education. Finally, students must be retested using the same examination used for initial testing to determine successful correction of deficiencies.

Since data relative to vocational preparatory program characteristics such as enrollments, completions, faculty, funding, and operation were very limited or nonexistent at the State level, a survey questionnaire was distributed to directors of vocational preparatory programs in the community colleges and school districts administering vocational education (Appendix F). In addition, site visits were conducted to some community colleges where vocational preparatory instruction was offered. Selected results are discussed in the following sections. Tabular data from the questionnaire are contained in Appendix F.

In this study, the term "qualifying programs" refers to those programs that meet Florida Administrative Code specifications requiring provision for vocational preparatory education to correct diagnosed deficiencies in the basic skills areas of reading, writing, and mathematics. Rule defines these programs as postsecondary adult vocational programs of 450 clock hours or more. In February 1990, the Division of Community Colleges reported that 62 such programs were being offered in 14 community colleges.

Organizational Structure

Responsibility for oversight at the State level of vocational preparatory education is shared by the Division of Community Colleges and the Division of Vocational, Adult and Community Education. Students have access to vocational preparatory instruction in a wide variety of settings administered by individual colleges and school districts. The primary delivery system for vocational preparatory education in Florida is the Individualized Manpower Training System (IMTS). By Fall 1991, DVACE will have completed a name change for IMTS. In the future, the program will be referred to as the System for Applied Individualized Learning (SAIL).

The Division of Vocational, Adult and Community Education adopted the IMTS in 1972 as the model for providing a program to support academically disadvantaged vocational students. IMTS was originally developed through the U.S. Department of Labor. Combined federal vocational and State funds support the program. Individual vocational education schools must apply for grants

annually through a proposal process. Geographical locations with large concentrations of academically disadvantaged persons as well as areas offering vocational education were identified as IMTS program sites. Approximately 91 programs exit in such diverse areas as vocational-technical centers, community colleges, comprehensive high schools, and Indian tribe educational centers. In 1989-90, fourteen community colleges and 20 local education agencies received IMTS program funds totaling slightly over $2 million (see Appendix G).

The majority of community colleges offering vocational preparatory education do so through the Individualized Manpower Training System program. In many colleges, vocational preparatory education is housed under a dean or director of vocational education. In other colleges, vocational preparatory programs are organized under the academic dean, student dean, or adult and continuing education dean. School districts and area vocational education centers use IMTS as the delivery system for vocational preparatory education.

Entry-Level Testing

As noted earlier in this chapter, Florida Statutes authorize the State Board of Education to prescribe examinations to assess student mastery of basic skills. Four tests are currently used:

(a) American College Testing Career Planning Program - Short Form Of Assessment Booklet

(b) Comprehensive Test of Basic Skills - Levels H-J (Measuring grade levels 7-12)

(c) Test of Adult Basic Education (TABE)/1967 Edition Forms 1 and 2, or 1986 Edition Forms 5 and 6 complete battery, or the Tests of Adult Basic Education Survey Forms

(d) Wide Range Achievement Test - Level 2

The Division of Vocational, Adult and Continuing Education is conducting a critical analysis of all of the designated tests for diagnosing basic skills in conjunction with the tests used in community colleges and adult education. Data from the Division of Vocational, Adult and Community Education for fiscal year 1987-88 show a total enrollment of 75,108 in qualifying programs. Of this total enrollment, 60.5 percent had not taken the entry-level test that is required within six weeks of enrollment. Eleven of the counties reported that none of the students enrolled had taken the test. Of the 29.5 percent that had completed the entry-level testing process, 81 percent had passed.

Perceptions of vocational preparatory program administrators towards the appropriateness of the mastery level scores on entry placement tests were mixed. Administrators at half of the community colleges believed that the current scores are set too low while four college administrators indicated that the scores are at the appropriate level. Center administrators were almost equally divided, with eight of 21 responding that present score levels were appropriate. Although five center administrators believed the scores to be too low, another seven qualified their responses by saying that scores for

some of the programs were too low. One center respondent added that there was no apparent correlation between scores and program or job requirements.

Given the lack of consensus on the adequacy of the scores used for referral to vocational preparatory education, the administrators were asked if they encourage students who score somewhat higher than the minimum scores on the tests to enroll in vocational preparatory instruction. The colleges were almost evenly split on this item. Most centers (81%), on the other hand, indicated they do encourage students with marginal scores to enroll in vocational preparatory instruction.

Enrollment

Data reported by the colleges and centers on program and enrollment trends depict two divergent trends. Half of the colleges reported stability in the number of qualifying programs, while at five of the 12 colleges (42%) the number of qualifying programs in 1988-89 exceeded by 10 percent or more the number of such programs offered in 1985-86. Among the centers, however, 62 percent reported little or no growth in the number of qualifying programs during that four-year period. Additionally, at almost one-fourth of the centers the number of qualifying programs declined by more than 10 percent.

Headcount enrollments fluctuated in qualifying vocational programs in both colleges and centers between 1985 and 1989. Among most of the community colleges, headcount enrollments were generally higher in 1988-89 than they had been in 1985-86, regardless of whether the number of qualifying programs had increased or stabilized. Center enrollments in these programs also increased for the most part during the four-year period. In the case of the centers, enrollments were maintained or increased even though the total number of qualifying programs generally did not increase measurably.

Colleges and centers showed great variation in the proportion of students enrolled in qualifying programs and needing vocational preparatory instruction. In all cases, however, fewer than 50 percent of the students enrolled in the qualifying programs in 1988-89 required remediation in the basic skills areas. The data suggested that slightly more of the students in community college programs required vocational preparatory than did students enrolled in the centers during the 1988-89 academic year. A comparison of the percentages of students needing vocational preparatory assistance in 1985-86 and 1988-89 indicated that the need for remediation has not diminished since 1985.

Student Characteristics

Students requiring vocational preparatory instruction generally meet IMTS criteria as "disadvantaged." The Perkins Vocational Education Act defines disadvantaged students as individuals (other than handicapped individuals) who have economic or academic disadvantages and who require special services and assistance in order to enable them to succeed in vocational education programs. Such terms include persons who are members of economically disadvantaged families, migrants, individuals who have limited English proficiency and individuals who are dropouts or are identified as potential dropouts from secondary schools. The definition does not include individuals

with learning disabilities. IMTS serves persons (a) who at the time of their application for entrance into vocational education do not have the required skills for success in their selected vocational program, or (b) who are enrolled in a vocational education program but require supportive services or a special program to enable them to succeed in a selected occupational program. The program is designed to remediate skills needed either before the disadvantaged student enters a vocational education program or concurrently with vocational education.

Information on the distribution by subgroups within the population of students in vocational programs that require preparatory education was largely unavailable. At the State level, this information has not been collected in the past for the Community College System. Full implementation of the Student Data Base in mid-1990 will provide such information.

The Division of Vocational, Adult and Community Education provided data on race/ethnicity and English proficiency for students who had attempted the basic skills tests in 1987-88 and 1988-89. On a state-wide basis, 25,009 students in qualifying programs took the tests in 1987-88 and 23,034 did so in 1988-89. Among the three racial/ethnic groups of whites, blacks, and Hispanics, the pass rates were 89.2 percent for whites, 78.8 percent for blacks, and 79 percent for Hispanics in 1987-88. During that year, 522 students identified as limited English proficient took the basic skills tests. The pass rate for that subpopulation was 68.2 percent. In 1988-89, the pass rate for white students dropped to 84.3 percent, to 70.3 percent for black students, and 60.2 percent for Hispanic students. Among limited English test takers, the pass rate declined to 56.3 percent.

Non-native English speakers found in vocational preparatory programs in 1988-89 were enrolled primarily in centers. Most of the colleges indicated that less than 10 percent of their vocational preparatory students were in this subpopulation. In contrast, while 57 percent of the centers also had less than 10 percent, 19 percent of the centers reported that from 11 to 25 percent of their students were non-native English speakers, and another 14 percent found that 26 to 50 percent were in this subpopulation. At one center, over 50 percent of the students in vocational preparatory education were non-native English speakers.

This study had anticipated examining data relative to gender and age as well as race/ethnicity and English proficiency, but little was available at the State level. The above discussion pointed out that the limited English proficient subpopulation is more prevalent in the centers than in the colleges. Additionally, DVACE data over two years suggest that pass rates on the basic skills tests are about 10 percent higher for whites than for either blacks or Hispanics and 20 percent higher than for limited English proficient students.

Delivery of Instruction

IMTS is based on individualized instruction focused on each student's vocational goal. The program is open entry/open exit, with self-paced instructional modules, flexible schedules, and performance-based evaluation. The system is composed of four component programs: academic skills,

complementary skills, employability behavior, and an occupational exploratory program. The academic skills component must be offered at every IMTS site. Basic skills instruction in reading, writing, and mathematics is available to students through multiple delivery methods. Once a student's need for academic remediation is diagnosed, appropriate learning experiences are prescribed and the learning activities are managed by the learning managers. Colleges and centers where vocational preparatory instruction is associated with an IMTS program generally have learning laboratories or centers with modules or packages for individualized computer instruction. A very successful experiment at Chipola Junior College allows students to check out computers for use at home. The Take-Home Computer Program encompasses reading, language, and mathematics instruction, including vocational specific basic skills lessons. The program promotes learning by the entire family. Audio/video materials may supplement learning modules. A few colleges and centers also utilize traditional classroom lecture/discussion techniques. Colleges and centers using IMTS materials for vocational remediation were satisfied with them and believed they were appropriate for their students' needs.

Remediation and Retention

Conversations with vocational preparatory program directors and other institutional administrators revealed inconsistencies in practice concerning whether basic skills deficiencies should be remediated prior to or during vocational coursework. The survey substantiated this inconsistency. At one college, students are required to correct vocational preparatory deficiencies in reading, writing, and mathematics before beginning their vocational courses. Five colleges did not have this requirement and six did "sometimes." One district center required remediation prior to coursework, 12 did not, and eight did "sometimes." Colleges and centers were also divided on whether State policy should require that vocational preparatory deficiencies be corrected before students begin vocational coursework. Administrators from both sectors suggested that remediation should take place prior to vocational coursework in cases where extensive remediation is needed or a student is enrolled in a highly technical field (i.e., automotive technology, electronics, allied health).

The statutory language requiring vocational preparatory instruction does not require prior testing (Section 233.0695, F.S.). An entry-level examination within the first six weeks after admission to the program is mandatory as is demonstration of mastery of the basic skills appropriate for the occupational program before a certificate is awarded. Correcting basic skills deficiencies while enrolled in job preparatory courses is the most common practice. In contrast, college preparatory work must be successfully completed prior to enrollment in a college-level course in order to better assure that the student is adequately prepared to perform at the college level. An important question relates to this assumption for vocational students: If a student enrolled in a specific vocational program cannot read at the minimum level designated for that program, thus requiring vocational preparatory reading instruction, can the student perform adequately in the other vocational courses? Can he/she read well enough to take the other vocational courses?

A second major concern related to when remediation is required focuses on whether students actually enroll in remedial programs, especially if they are not interested in the certificate but simply satisfied with getting the vocational skills. Data on retention through remediation as well as retention to program completion is very limited. The percentage of vocational students needing preparatory education who completed the required remediation within 12 months varied greatly among the colleges. The district vocational centers also exhibited variation, but 43 percent (nine centers) reported that over 75 percent of such students completed remediation within one year. Perceived reasons on why remediation was not completed were somewhat different for college and for center students. At the colleges, student withdrawal was attributed to either having achieved the skills desired or simply not yet having completed the vocational program. While these were also important at the centers, the number of skills to remediate was also a factor in student withdrawal.

Tracking or follow-up on students diagnosed for remedial instruction through vocational preparatory instruction was more common among the colleges than the centers. All of the colleges surveyed track these students either to program completion or withdrawal, through follow-up studies, or both. Four of the 21 centers reported no tracking mechanisms in place, but the remainder were involved in some form of student monitoring during enrollment or after leaving the program.

Funding

Funding to support vocational preparatory instruction offered in most community colleges may be supplemented through an IMTS grant. School districts rely primarily on IMTS awards. Some state funds generated through job preparatory programs have been redirected to help support vocational preparatory instruction when offered through the IMTS program. Also, State Board of Education rule (6A-14.054, FAC) provides for a student matriculation fee for vocational preparatory education. A state-wide average matriculation fee is calculated for vocational preparation as an instructional classification. Individual community college boards of trustees may then establish a matriculation fee that does not vary from the calculated statewide average by more than ten percent. The state-wide average vocational preparatory matriculation fee for 1988-89 was $11.00 per credit equivalent. Finally, the 1989 General Appropriations Act stipulated that $6,000,000 of the Community College Program Fund be used to enhance preparatory classes. including both college and vocational preparatory instruction. In some instances, the fourteen colleges designated as area vocational schools distributed these monies between both preparatory programs. Institutional reports submitted to the State Board of Community Colleges in October 1989 did not disaggregate proposed expenditures by preparatory program. Consequently, it was not clear how much of the designated $6,000,000 was dedicated to vocational preparatory education.

The combination of IMTS and State funding sources has provided at least some support, although it is not clear how much is contributed directly or indirectly, for these programs. It appears that students who need vocational preparatory instruction have sufficient access to such assistance in the State's vocational-technical centers. The vast majority of college and center

administrators reported that they had no students who were not receiving vocational preparatory instruction because of insufficient funds. Administrators noted, however, the need for additional funds to better serve the disadvantaged vocational students. In some instances, adequate computer-aided instruction was identified as a deficiency. Another suggestion cited the need for more support to improve the teacher-student ratio. Many students in vocational programs are "high risk" because they come from academically or otherwise disadvantaged backgrounds, are limited English proficient, are disabled, or have been out of school for some time. Instruction in these cases is labor intensive, often requiring one-on-one instruction in order to increase student retention and program completion.

Program cost data were obtained from the Division of Community Colleges for those colleges designated as vocational-technical centers (Appendix H). The total cost per full-time-equivalent (FTE) student ranged widely. In most colleges, the cost per FTE decreased as the number of FTE students increased. Nonetheless, generalizations are difficult as the data from many of the colleges were incomplete. Cost data were not available from the Division of Public Schools concerning vocational preparatory programs offered by school districts.

Overall, funding information relative to vocational preparatory instruction was scarce. Lack of program cost information particularly hampers an assessment of funding issues. Such information is necessary in order to monitor related concerns such as program impact, appropriateness of placement tests, and future funding needs.

Providing a designated program cost factor for vocational preparatory instruction may clarify in the future some of the funding concerns raised here. The Florida Education Finance Program (FEFP) appropriation specifies a cost factor for other special programs for vocational job preparatory areas such as agriculture, health, and technical, trade, and industrial programs. Provision in the FEFP for vocational preparatory education with a special cost factor may be appropriate to provide identifiable fiscal support for this program.

IV. ISSUES AND RECOMMENDATIONS

Florida postsecondary institutions have managed college preparatory and vocational preparatory programs for many years. Prior to preparatory legislation in the early 1980s, however, there was great diversity and little comparability among the programs in the various institutions. The postsecondary institutions were increasingly responsible for identifying and providing for students' academic deficiencies upon entering the college or university, yet there was a notably lack of commonality of course requirements or of entrance and exit criteria for decision making regarding remedial work. The absence of a state-wide structure for preparatory programs made accountability very difficult. Concern with this situation led the Commission in its **Master Plan for Postsecondary Education** (1982) to focus on strengthening remedial education in the State. The **Master Plan** specifically noted that state policies addressing the needs of underprepared and underachieving students could not be developed unless agreement was reached on college entrance and placement requirements. In response to the Commission's call for consistency in preparatory education, legislation effective in 1984 mandated common placement tests and testing procedures to assess basic computation and communication skills of students entering degree programs at the State's public community colleges and universities. During the five-year interim since establishment of the common placement procedures, much has been achieved to bring college and vocational preparatory instruction to a point where the programs could be examined and a preliminary assessment made. Through this study, the Commission recognizes the accomplishments in preparatory education. In addition, the Commission believes that refinements and continued institutional assessment are important to build upon the strengths attained and further improve college and vocational preparatory education. The following five issue areas summarize the Commission's major concerns.

State-Level Coordination

Although the offering of college and vocational preparatory education occurs within the institutional setting, the Division of Universities, the Division of Community Colleges, and the Division of Vocational, Adult and Community Education have oversight and accompanying reporting responsibilities for preparatory education. Existing policy requires only limited reporting to state offices on these programs, yet a large proportion of entering students, particularly those moving through the community college system and Florida A & M University, require preparatory work. Current reporting requirements focus on entry-level performance. For example, statute requires universities and community colleges to report to each school district on the performance of the students from that district who are enrolled at the state university or community colleges. These "feedback" reports indicate students referred to college preparatory programs. A second facet of the feedback reports requires the State Board of Education to report to the Legislature on the number of Florida high school graduates, by high school, referred to college preparatory programs. There are currently no comparable reporting requirements for vocational preparatory education.

A second type of reporting responsibility concerning college and vocational preparatory education is program review. Rule 6A-10.039, Planning and

Coordination of Postsecondary Educational Programs, defines college preparatory and vocational preparatory as separate programs, thus requiring inclusion in the five-year program review plans submitted to the Commission annually by the Division of Vocational, Adult and Community Education, the Division of Community Colleges, and the Division of Universities. These program review plans provide a schedule of the programs or groups of programs to be reviewed and the criteria by which the programs are to be evaluated. Accompanying the initial five-year program review recommendation in the **Master Plan** (1982), the Commission suggested the following specific criteria for program review; most of these points have been incorporated in some form into the divisions' reviews:

- relationship of the program to state needs and priorities,
- manpower needs,
- student demand,
- quality and characteristics of students,
- student outcomes, including graduate follow-up results,
- productivity of program in terms of students enrolled, graduates, or service to other programs in the institution,
- faculty and professional staff quality and productivity
- instructional quality, including average class size and student-faculty ratio,
- quality and accessibility of library resources,
- adequacy of other resources, including equipment. space and non-academic services,
- cost of the program, both instructional and full costs,
- overall quality of program,
- resources needs to accomplish specific improvements,
- possible unnecessary duplication of programs

In the late 1970s, predating existing program review statute, the Division of Universities conducted a review of college preparatory programs in place at the nine universities. For the most part, the divisions' five-year plans for academic years 1985-86 through 1990-91 do not encompass a review of preparatory programs. Notwithstanding, the Division of Community Colleges has incorporated college preparatory information as part of its current summative review of associate of arts programs. Also, limited information on vocational preparatory programs is available from annual reviews of IMTS programs conducted by the Division of Vocational, Adult, and Community Education. As more varied data to assess preparatory programs become available, a program review dedicated solely to college preparatory and vocational preparatory programs would be appropriate.

Recommendations:

1. **The Division of Community Colleges and the Division of Universities should each conduct a program review of college preparatory programs no later than academic year 1992-93.** Those institutions within the State University System that do not directly offer college preparatory instruction should provide specific information concerning their contractual arrangements with the local community colleges in such areas as

selection and supervision of faculty, preparation of course syllabi, selection of textbooks, and grading procedures.

2. **The Division of Community Colleges and the Division of Vocational, Adult and Community Education should each conduct a program review of vocational preparatory programs no later than academic year 1992-93.**

In general, there has been limited review and evaluation at the state or local level of data from preparatory programs. Data collected on student performance at entry on placement tests are compiled and distributed, but there are no collective data at the state level relative to student performance beyond this point. Additionally, there is no apparent consensus on the type of data to collect, and few institutions have generated the kinds of information needed to evaluate preparatory programs on their campuses.

Appropriate data are essential in program assessment. In providing direction for this study through proviso language, the Legislature requested an evaluation that encompassed almost every aspect of college and vocational preparatory programs and one that was very quantitative in nature. Prior to 1989, the kinds of information needed for informed program decisions at the local level and for policy decisions at the state level had not been available in a consistent, comparable manner from the colleges and districts. In addition to limited longitudinal data, the kinds of information compiled on a regular basis at the state level have been confined primarily to input or entry factors: the performance of first-time-in-college (FTIC) students on entry-level tests and general enrollment figures. While specific data on individual subtest areas and selected student subgroup characteristics may be obtained, other information important for program assessment usually has not been collected prior to 1989. Examples of such information include student retention to completion of preparatory courses, performance in college-level courses, academic program completion, student subgroup data by age, race/ethnicity, and major field of study.

The new Student Data Base developed by the Division of Community Colleges will collect much more detailed information to develop individual student, program, and institutional profiles. The community college data collected since Summer of 1989 will provide a better understanding of such concerns as patterns of withdrawal and repetition of preparatory courses, length of time to remediate, grades earned in college-level courses sequenced to the preparatory courses, and performance of student subgroups. Students enter preparatory courses for various reasons. Some are older returning adults, many are recent high school graduates who may not have taken the appropriate curriculum for college entry, and others are recent high school students who may simply not have attained the competencies necessary for college-level work even though they took the correct courses. Once institutions identify their preparatory clientele, appropriate strategies can be developed to work with the different subpopulations. To complement the quantitative data, qualitative information is also valuable in program evaluation. Descriptive narrative reports that cover such program characteristics as types of learning experiences and supplemental support services capture another aspect of the college and vocational preparatory programs. Not all institutions compile these data for their own use nor report them to the Division of Community Colleges, the

Division of Universities, or the Division of Vocational, Adult, and Community Education. With respect to vocational preparatory programs, data collection is dependent on collaboration among the Division of Community Colleges, the Division of Vocational, Adult and Community Education, and the Division of Public Schools.

A study of this nature and at this point in the history of preparatory education in Florida is opportune for establishing guidelines and direction for this important program. Four years' experience with mandated college and vocational preparatory education in the public sector, particularly in the collective knowledge available in the Community College System (encompassing the Division of Community Colleges and the 28 institutions), the Division of Universities, and Florida A & M University, represents a potentially rich source of information. Our expectations of college and vocational preparatory programs are very high, yet our understanding of the process based on aggregated information is very limited. Thoughtful planning and decision making at all levels must be based on the best data produced in an ongoing manner. Collecting and compiling such information at the institutional and state level will not be enough in the future to structure the preparatory programs to respond to the growing needs of the students, the colleges and universities, and the State. In addition to the critical steps of identifying and collecting the quantitative and qualitative information needed concerning these programs, there must also be an analysis and interpretation of the information in order to evaluate the quality of the programs. All of these activities should culminate in a document that is comprised of both data and results of the analyses and interpretations. Prepared and disseminated on a periodic basis, such a document should provide a wealth of information useful to institutions, state boards, and others, especially for the program reviews to be conducted. The Commission also recognizes that these activities will place demands on the research units of all divisions. However, the potential negative impact of the absence of such information more than justifies the investment of the time and resources necessary.

Recommendations:

3. **In addition to the 5-year preparatory program reviews, the Division of Community Colleges and the Division of Universities should each compile an annual analysis on college preparatory education designed to assist local and state decision makers in evaluating program quality and conducting long-range planning.** Much of the quantitative information needed from the institutions has been incorporated into the institutions' respective student data bases. Descriptive information should also be collected, however, in a systematic, comparable manner and available in a common format for reference. Additionally, information relative to college preparatory programs should identify enrollees on the basis of manner of entry, including those individuals who score above minimum levels but were referred into college preparatory instruction as well as those who self-select into preparatory courses.

4. Under the direction of the Division of Vocational, Adult and Community Education, one comprehensive annual analysis should

also be prepared jointly by the Division of Community Colleges, the Division of Vocational, Adult and Community Education, and the Division of Public Schools concerning vocational preparatory education to assist local and state decision makers in evaluating program quality. This analysis should contain similar types of data as indicated above for college preparatory programs, including program enrollments, cost, funding, expenditures, and retention. This data should be used for both short- and long-range planning to provide direction for vocational preparatory education. A common format to collect and report this information should be developed and implemented by the 1991-92 reporting year. Care should be taken to assure that all students engaged in vocational preparatory instruction are accounted for, regardless of the delivery system, project, or program utilized in offering the instruction.

The Division of Universities oversees college preparatory programs in the State's nine public universities. Current law, Section 240.117, Florida Statutes, sets the criteria that universities must meet in order to provide college preparatory instruction directly to their students: the percentage of in-coming students requiring college preparatory instruction must equal or exceed the average percentage of such students for the community college system. It is not clear, however, how a determination is made on whether a university is within these statutory guidelines. Data required and submitted periodically by the Community College System and the State University System include only FTIC recent Florida high school graduates, not all in-coming students. More importantly, however, is the appropriateness of using the community college system as the standard against which universities are measured. Students entering the public community colleges demonstrate very different academic characteristics than do students entering the State's universities. The Division of Community Colleges estimates that 50 to 60 percent of its incoming students require at least one college preparatory course. Given the present very high ratio of applicants to spaces in most of the SUS institutions, the increasing competition for those spaces, and the increase in grade point average for entering students, it is doubtful that any of the universities will approach the 60 percent average estimated by the Division of Community Colleges. A more useful measure of a state university's need to provide college preparatory instruction directly to its students might be the individual institution's new student population. Specifically, the prior year's incoming student cohort might be used to identify the proportion of that group which requires preparatory instruction on the basis of performance on entry-level examinations. Within the State University System in 1988-89, 8.46 percent of FTIC students scored below minimum scores on entry-level tests. By institution, the percentages ranged from 1.32 percent to 47.46 percent. A midpoint of 25 percent would represent a reasonable target while also providing a sizeable group of students to justify direct intervention by the institution.

Recommendation:

5. **Statutory language specifying conditions under which universities are allowed to offer college preparatory instruction should be revised so that authorization to offer preparatory programs is not contingent upon the percentage of in-coming community college students who require preparatory instruction.** An alternative approach could be to specify criteria that consider the percentage of incoming students at each university. For example, a university could offer preparatory instruction if 25 percent or more of its incoming students in Fall semester of the previous academic year scored below the minimum on placement tests.

As part of the annual reporting process, the Division of Universities submits an Entry-Level Testing/College Preparatory Program report to the Commissioner of Education. This report not only identifies the number of FTIC students who score below the minimum on the entry-level tests, but it also indicates the number of students who fulfilled or were fulfilling the preparatory exit requirements by enrolling in a preparatory course, by passing a criterion referenced assessment, or by passing a validated analogous norm-referenced test, as well as those enrolled part-time and not in preparatory courses, and students with other reasons for not being in college preparatory courses. In the case of the latter category, it is clear that some students do not follow advisement and register in a college-level course without first successfully completing preparatory requirements. Although this is not a major problem systemwide, it is a situation that should be monitored continuously in both systems. A second area of concern is the number of out-of-state students served in college preparatory programs. As indicated in Chapter II, 41.4 percent of the FAMU (32 percent in the SUS) students (unduplicated headcount) in 1988-89 who fell below the minimum scores in placement testing were from out of state. Unfortunately, comparable data on either exit performance or residency status were not available regarding students in the Community College System.

Financing Preparatory Programs

Many students in preparatory programs are "high risk" for one or more of the following reasons: they have come from academically and disadvantaged backgrounds; they are limited English proficient; they are disabled; or they have been out of school for some time. Instruction in these cases is labor intensive, often requiring one-on-one teaching in order to increase student retention and program completion. Instruction delivered in this way increases the cost factor. Most preparatory programs rely considerably on computers for instructional and practice purposes. The accompanying hardware, software, and physical facilities requirements also impact the cost of preparatory programs. Finally, associated costs to provide faculty and staff for these students drive the price tag even higher. Institutional commitments to assist underprepared students to move rapidly yet successfully through the necessary preparatory courses and on to academic program completion should be recognized. Since college preparatory instruction generates an additional cost burden for the institutions, a reward system could be implemented that

would provide a funding incentive for those institutions that assist students to move in a timely fashion through their required preparatory courses and on to successful completion of their associate degree programs.

Although information on preparatory program costs is not complete, expenditure data suggest that providing preparatory education is expensive. Community colleges expend approximately $30 million annually from their program funds for college preparatory education. The State Board of Community Colleges has estimated that the cost of instruction per FTE for college preparatory was about twice as much as in traditional college courses. The Board estimated that an additional $3.3 million was needed in 1990-91 to fully fund the estimated need in this area. Cost data on vocational preparatory instruction published by the Division of Community Colleges showed a wide variation among the reporting community colleges. Comparable cost data for school districts were not available from the Division of Public Schools. The annual appropriation for the Florida Education Finance Program provides a special cost factor for selected vocational programs. Such a cost factor may be appropriate to provide adequate fiscal support for vocational preparatory education.

Recommendations:

6. **The State Board of Community Colleges should continue to review expenditures for college preparatory instruction and seek sufficient funds to address the identified need in this area.**

7. **In order to recognize and reward institutions for success in moving students through college preparatory instruction to completion of the associate degree, the State should develop guidelines for special program funds to be linked to improved completion rates by college preparatory students in academic programs leading to the award of an associate degree.** These guidelines should take into consideration such concerns as the number of preparatory courses required and the length of time taken in completing the preparatory coursework.

8. **The Division of Vocational, Adult and Community Education in cooperation with the Division of Public Schools should determine the cost of instruction per full-time-equivalent student for vocational preparatory programs in school districts.** Based on this information, a special cost factor should be identified for vocational preparatory programs in the Florida Education Finance Program (FEFP) appropriation. The weight established in FEFP for this program should be comparable to expenditures by community colleges or districts.

Placement in Preparatory Programs

Placement testing is a critical component in the administration of college and vocational preparatory programs. State law requires the assessment of basic computation and communication skills of students who intend to enter a degree program at a public community college or state university. Four tests and

minimum scores for each of the four subtest subject areas are currently specified in State Board rule for college preparatory placement. Vocational preparatory placement is determined in a similar manner although based on four different tests, also designated in rule, to assess student mastery of basic skills.

In response to concern in recent years over the appropriateness of the four tests for college preparatory placement purposes as well as the cut scores for the subtests, the Commissioner of Education convened a task force in 1985 to examine the appropriateness of the designated entry-level tests. The task force recommended that the tests be continued and that computerized placement testing be permitted. However, during campus visits and public testimony received for this study, some college preparatory program faculty and administrators again expressed the belief that some of the current tests were not appropriate to measure basic skills levels.

The minimum scores designated in rule, especially for college preparatory, emerged as a second area of concern in this study. Some college preparatory program directors believed that the minimum scores were too low. Consequently, students enrolled in college-level courses who actually needed pre-college work. In some cases, faculty or advisors referred these students back to preparatory courses. Unfortunately, data were not available to document the number of referrals in either the community college or university system. The issue of minimum levels is an important one, not only for the students involved but also for the institutions and systems. An increase in any minimum score will augment the number of students referred to college preparatory courses. The ramifications of such decisions directly impact the individual institution's human, fiscal, and physical resources. This dilemma must be weighed, however, against the obligation of the educational system to place students where they can receive adequate instructional support to enhance their success in college.

Given the questions among practitioners and administrators concerning the kinds of placement tests currently used and the difficulty in establishing concordance among tests to set minimum scores, it may be timely to examine other testing alternatives. Some individuals have argued for one placement test that is similar to the College Level Academic Skills Test (CLAST). Others have favored the use of CLAST as both an entry and exit test. A related option would require a placement test in high school, perhaps during the tenth or eleventh grade, to assist students in identifying their computational and communication skills levels early enough to correct deficiencies before graduation from high school. This approach has been supported by the Commissioner of Education through a recommendation in the Commissioner's Task Force Report on Assisting Minority Students in Meeting the Requirements of the College-level Academic Skills Test:

> The Department of Education should develop a program to test students in high school to determine how well the student is prepared in the skills necessary for college-level work and to enter the world of work. This testing should be done in time for the student to work on the improvement of these skills prior to high school graduation.

In the **Master Plan Update** (1988), the Commission recognized Florida's leadership in establishing state-wide assessment programs to monitor progress of students throughout K-12. As noted in the **Update**, however, the policies governing the state's major testing programs, including entry-level tests and the CLAST, were developed somewhat independently of each other. The Commission recommended that the Department of Education review the statewide assessment programs to determine if the K-12 and postsecondary programs formed a well-integrated assessment system. In 1989, the Commissioner of Education convened a Task Force on Testing to examine the possibility of eliminating unnecessary testing and of moving from testing of minimum competencies toward measurement of higher order skills. Most recently, the Commissioner appointed a committee of DOE staff to develop recommendations for improvements in Florida's Statewide Student Assessment Program. Among the committee's recommendations at the high school level was use of a nationally norm-referenced achievement test for all students in grade 10 (Grade Ten Assessment Test or GTAT) and a new High School Competency Test (HSCT) for grade 11. The committee's report did not address postsecondary testing other than to say that the GTAT could be used to determine readiness for postsecondary education. The Department of Education has also been reviewing several college preparatory issues, including the relationship between preparatory instruction and CLAST as well as the joint concerns of placement test appropriateness and minimum score levels. As the quality and adequacy of the data concerning preparatory education improve, placement and related testing issues must continue to be evaluated.

Recommendations:

9. **The Department of Education should continue to periodically assess the appropriateness of current placement examinations as well as the minimum scores for placement in college-level instruction.** Consideration should be given to revising State Board of Education Rule 6A-10.0315 to identify minimum scores for only one placement test as the standard. The Articulation Coordinating Committee would then recommend and publish other authorized equivalent placement minimum scores in accordance with the single standard.

10. **The Department of Education should implement modifications to the high school assessment program which would address the utilization of an examination in high school for early diagnosis of students' computational and communication skills levels for college and the workplace.** This kind of testing initiative is needed as an early warning system to identify students' academically deficient areas and to provide students assistance in strengthening these essential skills prior to high school graduation.

Completion of Preparatory Requirements

Completion criteria for students in both college and vocational preparatory instruction are specified in State Board rule 6A-10.0315. This rule also allows college preparatory students to enroll for up to three semesters in each skill area. However, if a student withdraws officially before the

midpoint of a semester, enrollment that semester does not count against the student for purposes of the three semester limitation. Interviews with college preparatory administrators revealed that many students withdraw from a preparatory class in which they have low grades in order to avoid having the course count against them. Thus, the drop provision of the three semester rule renders the rule ineffective for most monitoring purposes. Additionally, the limited data available to date indicate that students are taking an inordinate amount of time to complete college preparatory requirements. Those students who score very low, perhaps below ninth grade level, on entry tests have much more to compensate for or to remediate than do other students who score higher on the placement tests but not above cutoff scores. Institutions should strengthen their advising procedures with these students so that the students clearly understand the probabilities of passing the preparatory courses and the extent of the academic work ahead of them prior to enrolling in college-level work. As part of this process, the students should be made aware of the educational programs available to them through other educational agencies in the community.

A different completion issue emerged in vocational preparatory programs. Statute requires that vocational students be tested within the first six weeks after admission to a vocational program. Students may then correct diagnosed basic skills deficiencies any time before a certificate is granted since neither statute nor rule currently specify any other completion limitations for vocational preparatory instruction. Results of the vocational preparatory survey and discussions with program administrators show that a number of students referred for vocational preparatory instruction withdrew from the vocational program before completing the required preparatory work. Much of the early withdrawal was attributed to students' acquisition of the vocational skills they sought upon entry to the program. Program administrators were divided on whether students should be required to complete basic skills remediation prior to enrolling in any or selected vocational courses. Such a requirement may have a chilling effect, discouraging some students from entering or continuing their vocational programs. As one institution pointed out, a large proportion of vocational students are employed and attend part time, making it difficult for them to schedule the time to remediate. On the other hand, it is difficult to imagine how students perform successfully in some of the high-tech vocational courses if their reading and/or mathematics skills levels are very low or if the students must remediate in two or three of the basic skills areas. Rather than requiring prior remediation for all programs, a more reasonable approach would be to identify those situations or conditions under which attainment of vocational preparatory skill needs should precede continuation in the vocational program.

Recommendations:

11. **State Board Rule 6A-10.0315(7) should be revised such that the length of time a student has to complete all college preparatory requirements is based on four attempts or enrollments per discipline rather than on the number of semesters.** The four attempt recommendation relates to the traditional three-credit hour semester preparatory courses. Since some institutions use a modular approach where

preparatory courses are less or more than three credit hours, rule would also need to specify an equivalency for such courses. Once a student has enrolled four times in a subject area (e.g., mathematics, reading, writing), the student is no longer eligible to enroll in that subject area again. Provision in rule for withdrawal for reasons of personal hardship or disability or under major extenuating circumstances would not be affected by the new four attempt rule.

12. **The Division of Community Colleges, the Division of Vocational, Adult and Community Education, and the Division of Public Schools should jointly identify the courses, programs, and conditions under which vocational preparatory students should demonstrate mastery of basic skills as a requisite for entry.**

Postsecondary/Secondary Coordination

Ongoing and meaningful communications between the postsecondary and secondary education levels are essential to understand and address the many issues relative to student readiness and college and vocational preparatory programs. The postsecondary feedback of information to high schools required in statute provides individual student performance information on entry-level tests to school districts. Also, the Commissioner of Education includes programmatic intervention information in her annual report on college preparatory programs to the State Board of Education. Efforts are presently underway in the Department of Education to revise the postsecondary feedback reports this year so that they are more useful to school districts. A related initiative under discussion would allow school districts to access student level (but not student identifiable) data through the Florida Information Resource Network (FIRN).

High school students can best avoid college preparatory courses by completing in secondary school a combination of selected computational and communication skills building courses. Convincing students and their parents that such courses are essential rests to a great extent on high school counselors and teachers. As a joint project of the Division of Public Schools, the Division of Education prepares and distributes Counseling for Future Education, a comprehensive handbook to assist high school students in making college decisions. The handbook's section on the Community College System and the State University System both mention placement testing and college preparatory. Also, the State University System section lists specific courses which satisfy course distribution requirements in English, mathematics, natural science, social science, and foreign language. This listing identifies those courses that best prepare students to do university level work. Beginning in academic year 1990-91, the Division of Community Colleges' section in the handbook will reference this list as suggested courses that high school students take to prepare for an associate degree program in the public community college system.

Recommendations:

13. **The school districts should strengthen collaboration with the local community colleges and universities to identify necessary curricular or other modifications that might improve student readiness for postsecondary education.** For example, activities similar to faculty-to-faculty seminars between community college and university faculty would bring developmental educators together from high schools and community colleges to discuss curricular and data issues. If the Division of Public Schools has access to student readiness information through the Florida Information Resource Network, high schools may be able to collect valuable information on their graduates' performance on entry-level tests.

Conclusion

Student readiness for postsecondary education has been a major concern in Florida as nationally. The State has addressed the growing problem of underprepared students through college and vocational preparatory programs offered by postsecondary institutions. Legislation enacted during the mid 1980s enhanced the consistency of program administration by establishing a state-wide structure and augmenting reporting requirements. The Commission was directed to assess both college and vocational preparatory programs.

The study concluded that progress has been made in understanding how the State's college and vocational preparatory programs function. However, more as well as different kinds of information are needed regularly at the system and the institutional level for use in evaluating program quality and long-range planning. For example, programmatic and student information collected at entry needs to be balanced with information about students as they move through preparatory instruction, enroll in college-level courses, and progress to program completion. State-level program reviews and periodic data analyses should provide a better profile on an ongoing basis of preparatory programs and their effectiveness.

College and vocational preparatory programs are an important component in the State's commitment to enhance access to postsecondary education. Although data are limited, it appears that these programs have provided the bridge that many students need to correct academic deficiencies and move forward in achieving their college and vocational education goals.

APPENDIX A

Florida Statutes Related to
Preparatory Programs

228.072 Adult general education.—

(1) SHORT TITLE —This section shall be known and may be cited as the "Florida Adult General Education Act."

(2) LEGISLATIVE INTENT —

(a) The intent of this section is to provide educational opportunities for adults in this state and to encourage provision of educational services that will

1 Enable all adults to acquire basic skills necessary to at least attain basic and functional literacy as defined in s. 228.0713.

2 Enable adults who so desire to continue their education to at least the level of completion of secondary school.

3 Make available to adults the means to secure training that will enable them to become more employable, productive, and responsible citizens.

(b) It is further intended that such educational opportunities shall be available for those adults who have not received a high school diploma and for those adults who have received a high school diploma but whose level of achievement, based on standard measures, indicates that additional basic skills are necessary in order to function effectively in everyday life situations, to enter the job market, or to enter a job training program.

(3) PURPOSE —The purpose of this section is to provide state leadership and financial support to encourage and assist local educational agencies and other governmental and nongovernmental agencies in the establishment and maintenance of adult education programs.

(4) DEFINITIONS —The following terms, wherever used or referred to in this section, have the following meanings:

(a) "Adult general education" means a program of courses designed to serve the general educational needs of adults as individuals, as parents, as members of a family, and as citizens. Such programs shall serve as a linking agent to lifelong learning opportunities and shall include:

1 Basic skills education courses at or below an eighth grade educational level in the language arts, including English for persons who speak another language, mathematics, natural and social sciences, health, and consumer education, as well as courses that will enable adults to acquire basic skills necessary to attain basic or functional literacy, as defined in s. 228.0713.

2 Secondary education courses at or above a ninth grade educational level for high school credit leading to award of a high school diploma by the local educational agency.

3 Review courses in preparation for taking the general educational development tests to earn a Florida high school diploma.

4 Courses and activities to provide the academic skills needed to pursue postsecondary adult vocational training to obtain employment. This category of courses shall be known as vocational preparatory. Such instruction may be provided at vocational-technical centers, adult education centers, and community colleges pursuant to s. 233.0695 effective July 1, 1985.

5 Courses and activities to provide high school graduates who intend to pursue degree-credit postsecondary courses with additional academic preparation before such pursuit. This category of courses shall be known as college preparatory. College preparatory programs shall provide competency-based instruction for the development of college-entry competencies in reading, writing, mathematical reasoning, and logical thinking. Participation in college preparatory courses shall be limited to students who possess high school diplomas or the equivalent, who apply to enroll in degree programs.

6 Courses and activities to provide any adult with the opportunity to improve his competencies in any curriculum frameworks identified in the State Course Code Directory. This category of courses shall be known as lifelong learning.

7 Courses and activities available for certificate-of-completion recipients by participation in the statewide assessment program with utilization of state minimum performance standards and the adult performance literacy model.

(b) "Commissioner" means the Commissioner of Education.

(c) "Department" means the Department of Education.

(d) "Local educational agency" means the school board of a public school district or the board of trustees of a community college when that board is responsible for administrative control and direction of adult education within the service area of the agency.

(5) PRIORITY FOR ACADEMIC IMPROVEMENT SERVICES —The adult general education program shall provide academic improvement services to students in the following priority:

(a) Students who demonstrate skills at less than a fourth grade educational level as measured by tests approved for this purpose by the State Board of Education, and who are studying to achieve basic literacy.

(b) Students who demonstrate skills at or above the fourth grade level but at or below the eighth grade level as measured by tests approved for this purpose by the State Board of Education, and who are studying to achieve functional literacy.

(c) Students who are earning credit required for high school diplomas or preparing for the Test of General Educational Development (GED).

(d) Students who have high school diplomas and require specific improvement in academic or learning skills before pursuing postsecondary educational goals:

1 To obtain or maintain employment or to benefit from postsecondary adult vocational education programs; or

2 To pursue degree-credit collegiate academic education or postsecondary vocational degree programs.

(e) Students who enroll in lifelong learning courses or in courses designed for specific types of students but which may also provide any adult with the opportunity to improve his competencies in any curriculum framework. A student is a lifelong learning student if he enrolls in an adult basic or secondary education course or a vocational preparatory course, has received a high school diploma, and does not demonstrate skills at or below the eighth grade level.

(6) INTERAGENCY COOPERATION —

(a) Each local educational agency shall test, at its own expense, persons assigned to case management under the employment and training program operated by the Department of Health and Rehabilitative Services pursuant to s. 409.027 to determine whether such persons lack basic or functional literacy skills as defined in s. 228.0713. Such testing shall be conducted at a site mutually acceptable to the local educational agency and the Department of Health and Rehabilitative Services.

(b) Local state agencies, including the Department of Labor and Employment Security, and the Department of Health and Rehabilitative Services, shall make clients aware of adult basic skills education programs available

through the appropriate local educational agency In addition, the identity of persons found to be lacking basic or functional literacy skills, or who indicate that they have completed fewer than 8 years of schooling, shall with their consent, be made available to the local educational agency The local educational agency shall maintain a record of the number of referrals by agency and the number of persons enrolled as a result of such referrals

(c) To the extent funds are available, the Department of Health and Rehabilitative Services shall provide necessary day care and transportation services to its clients enrolling in a basic skills education program for adults

(7) PROVISION OF INSTRUCTION —Both community colleges and school districts may offer adult basic, secondary education courses and adult vocational preparatory courses and activities within the same service area upon approval of the regional coordinating council Any state university in which the percentage of incoming students who require college preparatory instruction equals or exceeds the average percentage of such students for the community college system may offer a college preparatory program Nothing in this subsection prohibits area vocational-technical centers from contracting with community colleges for the provision of vocational preparatory instruction

(8) FINANCING —

(a) The annual allocation to finance operation of the adult education program in each school district under the provisions of the Florida Education Finance Program

shall be determined in accordance with s 236 081 The annual allocation to finance operation of the adult education program in each community college under the provisions of the State Community College Program Fund shall be determined in accordance with s 240 359

(b) The following programs shall be evaluated and funded as separate and distinct categories adult basic and secondary education adult vocational preparatory adult college preparatory and lifelong learning

(c) 1 No matriculation or tuition fees shall be charged for adult basic instruction for students who demonstrate literacy skills below the eighth-grade level or for adult basic or secondary education instruction for students who have not obtained high school diplomas All other students with high school diplomas or the equivalent who are taking adult basic or secondary education instruction must pay matriculation and tuition fees in accordance with s 230 645 and the rules adopted by the State Board of Education

2 All students enrolled in vocational preparatory programs shall be charged fees equivalent to the fees charged for postsecondary adult vocational instruction, except that students enrolled in vocational preparatory programs who have not obtained high school diplomas or the equivalent or who have basic skills which have been determined to be at or below the eighth-grade level as provided by State Board of Education rule are exempt from this requirement When college preparatory and vocational preparatory instruction are provided in the same class section, the community college may charge a single fee for both types of instruction

3 All students enrolled in college preparatory programs shall be charged fees equivalent to the fees charged for credit courses at the community college

4 Fees collected annually for recreation and leisure time programs shall be equal to, but not exceed, the cost of providing such programs by a school district or community college

(d) Expenditures for college preparatory students shall be reported separately Allocations to community colleges for college preparatory and lifelong learning instruction shall be based on actual full-time equivalent enrollment The results of program reviews shall be included in the determination of subsequent allocations The completion by a student of such courses shall not be counted for credit toward an associate or baccalaureate degree

(e) The commissioner shall recommend the levels of funding for public school and community college adult education each fiscal year and make other recommendations or reports as he deems necessary or as required by rules of the state board

(f) The State Board of Education shall define by rule the level and courses of instruction to be funded through the college preparatory program The state board shall coordinate the establishment of costs for college preparatory courses the establishment of statewide standards which define required levels of competence acceptable rates of student progress, and the maximum amount of time to be allowed for completion of college preparatory instruction The state board shall further establish the program review criteria for such programs

(9) BUDGET —The department shall include in its legislative budget funds necessary to implement this section

(10) TECHNICAL ASSISTANCE —The department is authorized to provide such technical assistance as is necessary to develop and maintain adult education programs The department may use its own staff or such consultants as may be necessary to accomplish this purpose

(11) USE OF FACILITIES —The buildings land equipment and other property owned by a local educational agency may be used for the conduct of the adult education program The local educational agency may also use the buildings land equipment and other property owned or leased by cooperating public or private agencies organizations and institutions in the conduct of the adult education program

History —s 1 ch 81-152 s 46 ch 84-338 s 37 ch 85-80 s 33 ch 86-154 as 15 5 ch 87-329 s 1 ch 88-399 s 8 ch 89-189 as 25 45 ch 89-38

Note — Section 405 021 the "Public Assistance Productivity Act" was repealed by s 3 ch 87-94 Section 1 ch 87-94 creates s 405 225 the "Florida Employment Opportunity Act" Note however that generally a specific cross-reference is unaffected by subsequent amendments to or repeal of the statute See Preface

233.051 Programs of remediation.—

(1) By August 1, 1990, programs of remediation excluding college preparatory instruction and vocational preparatory instruction conducted pursuant to s 228.072, shall primarily be the responsibility of the district school boards through their schools. This remediation shall provide students with enhancement or improvement of any basic skills in which the students are deficient and shall assist students in moving from one grade or level to another and assist residents of the district who request remedial assistance, including those residents with high school diplomas.

(2) Each district school board shall use the regular periodic report of academic progress for students in kindergarten through grade 8 to notify parents when a student is working at a skill level below that of his assigned grade placement.

(3) The district school boards shall work with the community colleges in their districts in order to assure that the community college students have access to remedial education.

(4) Beginning October 1, 1984, the Department of Education shall submit an annual report to the Legislature outlining the progress being made in the school districts, community colleges, and state universities toward fulfilling the objectives of this section and s. 240.117.

History.—s. 23, ch. 83-325; s. 2, ch. 87-163; s. 2, ch. 88-381.

233.0695 Vocational preparatory instruction.—

(1) Each area vocational-technical center shall provide vocational preparatory instruction through which students will receive basic skills education.

(2) Students who enroll in a postsecondary adult vocational program of 450 clock hours or more shall complete an entry-level examination within the first 6 weeks after admission into the program. The state board shall designate examinations currently in existence, the results of which are comparable across institutions, to assess student mastery of basic skills. Any student deemed to lack a minimal level of basic skills shall be referred to vocational preparatory instruction for a structured program of basic skills instruction. Such instruction may include the provision of English as a second language. No such student may receive a certificate of vocational program completion until he has demonstrated mastery of the basic skills appropriate for the occupational program as provided by rules adopted by the State Board of Education. Exceptional students, as defined in s. 228.041, may be exempted from the provisions of this section.

(3) The state board shall by rule implement the provisions of this section. Such rules shall also establish statewide standards of basic skills mastery for vocational programs of less than 1,800 hours.

History.—s. 6, ch. 84-338; s. 12, ch. 85-109.

240.117 College preparatory instruction in community colleges and state universities.—

(1) On or before June 30, 1984, from tests currently in use in community colleges and universities, the State Board of Education shall specify common placement tests and testing procedures which will assess the basic computation and communication skills of students who intend to enter a degree program at any public community college or state university. Effective July 1, 1985, the state board shall adopt scores below which a student is determined to need additional preparation. The State Board of Education shall adopt rules which enable the community colleges or state universities to implement appropriate modifications of the test instruments or test procedures for exceptional students.

(2)(a) Effective July 1, 1985, community college or state university students who have been identified as requiring additional preparation pursuant to subsection (1) shall enroll in college preparatory adult education pursuant to s. 228.072 in community colleges to develop needed college-entry skills. These students shall be permitted to take courses concurrently in other curriculum areas for which they are qualified while enrolled in college preparatory instruction courses. Credit awarded for college preparatory instruction may not be counted towards fulfilling the number of credits required for a degree.

(b) The administrators of a state university may contract with a community college board of trustees for the community college to provide such instruction on the state university campus. Any state university in which the percentage of incoming students requiring college preparatory instruction equals or exceeds the average percentage of such students for the community college system may offer college preparatory instruction until the year 1990 without contracting with a community college.

(3) No student shall be enrolled in a college credit mathematics or English course on a dual enrollment basis unless the student has demonstrated adequate precollegiate preparation on the section of the basic computation and communication skills assessment required pursuant to subsection (1) that is appropriate for successful student participation in the course.

History.—s. 24, ch. 83-325; s. 24, ch. 84-338; s. 9, ch. 87-212.

240.118 Postsecondary feedback of information to high schools.—

(1) On or before January 1, 1984, the State Board of Education shall adopt rules authorizing each state university and each public community college to report to each school district on the performance of the students from that school district who are enrolled at the state university or public community college. Such reports shall indicate students referred to college preparatory programs.

(2) The State Board of Education shall report to the Legislature no later than March 1 of each year on the number of Florida high school graduates, by high school, referred to college preparatory programs.

History.—s. 25, ch. 83-325; s. 96, ch. 86-149.

APPENDIX B

Florida Administrative Code Rules
Related to Preparatory Programs

6A-10.038 Postsecondary Feedback of Student Information to High Schools.

(1) Each state university president and the president of each public community college shall report to the school district on the performance of the school district's public high school graduates who are enrolled at the university or community college. These reports shall indicate students who have been referred at the postsecondary institution to college preparatory instruction. This student information shall be protected according to Section 228.093, Florida Statutes.

(2) The individual student reports submitted to the school districts shall include the following requirements.

(a) The reports shall include all the first-time-in-college students who enrolled in a community college or state university during the report period and who were granted a high school diploma during the previous twelve months. The report period shall be defined as the twelve month period beginning with the summer term. The individual student reports shall be listed alphabetically by student and by school.

(b) For each student the following common information shall be reported:

1. Name of school and county number.
2. Student legal name, social security number, gender, ethnic origin, and Florida student identifier number, when available.
3. Month, day and year of birth.
4. Reporting institution.
5. Term of first enrollment.
6. Areas of reading, writing or mathematics for which the student's entry level test score was below the scores as listed in Rule 6A-10.0315, F.A.C.
7. Areas of reading, writing or mathematics college preparatory instruction in which the student enrolled at the reporting institution.
8. Credits attempted and earned toward graduation.
9. Grade point average, and
10. Courses taken.

(c) The reports shall be provided to the superintendents of the school districts by the university or community college during the month of July of each year.

(d) The reports shall include the information normally recorded on the student transcript by the university or community college.

(3) By November 1 of each year, the Commissioner of Education shall report to the State Board of Education on the number of Florida high school graduates, enrolled as first-time-in-college students in a community college or state university during the report period, who scored below the common placement test standards established for reading, writing and mathematics in Rule 6A-10.0315, F.A.C. These students shall be reported by the high school from which they graduated.

Specific Authority 229.053(1), 240.118 FS. Law Implemented 240.118 FS. History - New 9-24-84. Formerly 6A-10.38. Amended 11-7-89.

6A-10.0315 College Preparatory Testing, Placement, and Instruction.

(1) First-time-in-college applicants for admission to community colleges and universities who apply to enter degree programs shall be tested prior to the completion of registration, using one (1) or more of the tests listed herein, and shall enroll in college preparatory communication and computation instruction if the test scores are below those listed herein.

(a) ACT Assessment, American College Testing Program.

Reading	14	Composite Standard Score
Writing	14	English Usage Standard Score
Mathematics	13	Mathematics Usage Standard Score

(b) ASSET, American College Testing Program.

Reading	22	Raw Score
Writing	43	Raw Score
Mathematics	12	Elementary Algebra Raw Score

(c) MAPS, College Entrance Examination Board.

Reading	12	Scaled Score
Writing	10	Test of Standard Written English Scaled Score
Mathematics	206	Elementary Algebra Scaled Score

(d) SAT, College Entrance Examination Board.

Reading	340	Verbal Standard Score
Writing	30	Test of Standard Written English Scaled Score
Mathematics	400	Mathematics Standard Score

(2) Nothing provided in Rule 6A-10.0315(1), FAC, shall be construed to prevent the enrollment of a student in college preparatory instruction if the community college or university determines that such enrollment would enhance the student's opportunity for future academic success. The determination of enrollment would be made after counseling with the student and the analysis and consideration of other assessment techniques and measurements, which may include transcripts, grade evaluations, diagnostic, placement or psychological instruments, or other proven indicators or predictors of academic performance.

(3) Students whose first language is not English may be placed in college preparatory instruction prior to the testing required herein, if such instruction is otherwise demonstrated as being necessary. Such students shall not be exempted from the testing required herein.

(4) Test modifications and exemptions in Rule 6A-10.0311(4), FAC, shall apply in the case of applicants with records of physiological disorders.

(5) Institutions affected by this rule shall accept test scores on any one of the tests identified in Rule 6A-10.0315(1), FAC. Individual student scores shall be valid for three (3) years.

(6) During their first term, full-time students who are registered for at least twelve (12) credits, shall begin competency-based preparatory instruction based on the placement test results. Part-time students shall enroll prior to completing twelve (12) credits.

(7) Students shall not enroll for more than three (3) semesters in each skill area to complete college preparatory instruction. Students who withdraw officially before the midpoint of a semester may be considered to have not enrolled that semester for purposes of this limitation. Students who withdraw officially at or after the midpoint of a semester shall be considered to have enrolled that semester unless the withdrawal can be documented as due to reasons of personal hardship or disability, or under major extenuating circumstances. Such exceptions require approval under guidelines established by the boards of trustees or the Board of Regents. Students enrolled in English as a second language may be exempted from this limitation based on a plan submitted by the institution and approved by the Board of Regents or the State Board of Community Colleges for their respective institutions.

(8) Uniform standards for completion of competency-based college preparatory instruction shall correspond to those listed herein for placement in college credit instruction. Once competence has been certified, other public community colleges and universities shall accept the certification upon student transfer. Competence shall be certified upon:

(a) Successful completion of courses in which the competencies specified in Rule 6A-10.033(1)(c)1., FAC, are taught,

(b) Passing a criterion-referenced assessment which tests the competencies specified in Rule 6A-10.033(1)(c)1., FAC, or

(c) Achieving the scores in Rule 6A-10.0315(1), FAC, on the tests listed, or the comparable scores on a validated, analogous norm-referenced test(s).

(9) Students enrolled in college preparatory instruction shall be permitted to take courses concurrently in other curriculum areas for which they are qualified.

(10) The Commissioner shall report to the State Board of Education by November 30 each year the results of the common placement testing.

Specific Authority 229.053(1), 228.072(7)(f) FS. Law Implemented 228.072(7)(f), 240.117 FS. History - New 7-15-84, Amended 6-6-85, Formerly 6A-10.315, Amended 5-17-88.

6A-10.040 Basic Skills Requirements for Postsecondary Adult Vocational Education.

(1) Students who are enrolled in a postsecondary adult vocational program of four hundred fifty (450) clock hours or more shall complete a basic skills examination within the first six (6) weeks after admission into the program. The following examinations are designated to assess student mastery of basic skills:

(a) American College Testing Career Planning Program - Short Form of Assessment Booklet

(b) Comprehensive Test of Basic Skills - Levels H, J (Measuring grade levels 7-12)

(c) Test of Adult Basic Education - 1967 Edition Forms 1 and 2, or 1986 Edition Forms 5 and 6 complete battery or the Tests of Adult Basic Education Survey Forms

(d) Wide Range Achievement Test - Level 2

(2) Minimum basic skills grade levels in mathematics and language are defined in each vocational program description adopted under Rule 6A-6.0571, FAC, and published annually by the Commissioner in the document entitled "Vocational Education Program Courses Standards."

(3) Students deemed to lack the required minimum level of basic skills as measured by one of the designated examinations shall be provided with instruction specifically designed to correct the deficiencies.

(4) Upon completion of the instruction which was tailored to meet the individual needs students shall be retested by using the same examination that was used for initial testing.

Specific Authority 229.053(1), 233.0695(3), FS. Law Implemented 233.0695, FS. History--New 10-6-85, Formerly 6A-10.40, Amended 5-2-89.

APPENDIX C

Selected Results from Southern Regional Education Board
Survey of Remedial Programs

FLORIDA RESULTS OF SREB STUDY OF REMEDIAL PROGRAMS

In 1989 the Southern Regional Education Board (SREB) surveyed its 15 member states concerning remedial education in postsecondary institutions. Results of that study will be available in late spring of 1990. A similar survey had been conducted by SREB in 1987. The current survey collected information in the following areas:

- Institutional Information
- Remedial Policy and Placement
- Enrollment
- Course Description
- Retention
- Evaluation
- Exit Criteria
- Faculty
- Funding

SREB provided the Commission with responses from the 38 Florida institutions that returned the survey. Of these 38, selected results from the 21 public community college returns are discussed below. In many instances, data reflect institutional estimates rather than pre-determined or known information.

TABLE 1

INSTITUTIONAL PERCEPTIONS OF ENROLLMENT TRENDS
IN COLLEGE PREPARATORY PROGRAMS
IN FLORIDA COMMUNITY COLLEGES
1984 TO 1989

	OVERALL %	READING %	WRITING %	MATH %
Increased	68	55	50	70
Decreased	11	15	15	10
Same	21	30	35	20

Source: Commission staff analysis of Southern Regional Education Board raw data, 1989.

TABLE 2

NUMBER OF INSTITUTIONS CONDUCTING EVALUATION
BY TYPE AND FREQUENCY OF EVALUATION
IN FLORIDA COMMUNITY COLLEGES
1988-89

	STUDENT EVALUATION	INSTRUCTOR EVALUATION	COMPLETION RATE	FOLLOW-UP STUDIES	COURSE/PROGRAM EFFECTIVENESS
Semester	8	6	10	3	3
Annually	5	3	5	4	6
Bienially	2	1	0	0	0
Other	3	4	1	5	6
No Response	3	7	5	9	6
TOTAL	21	21	21	21	21

Source: Commission staff analysis of Southern Regional Education Board raw data, 1989.

TABLE 3

CHARACTERISTICS OF FACULTY TEACHING
REMEDIAL COURSES IN FLORIDA COMMUNITY COLLEGES
BY COLLEGE FREQUENCY
1989

NUMBER OF FACULTY TEACHING AT LEAST ONE REMEDIAL COURSE	COLLEGE FREQUENCY
1 - 10	5
11 - 20	3
21 - 30	1
31 - 40	3
41 - 50	2
51 or more	6

NUMBER OF FACULTY	EMPLOYMENT STATUS	
	FULL TIME	PART TIME
0	0	2
1 - 10	10	5
11 - 20	3	2
21 - 30	3	4
31 - 40	2	3
41 - 50	2	3
51 or more	0	1

NUMBER OF FACULTY	TEACHING BASIS		
	HIRED	ASSIGNED	VOLUNTEERED
0	3	4	12
1 - 10	6	8	3
11 - 20	3	2	0
21 - 30	2	2	1
31 - 40	4	0	1
41 - 50	0	1	2
51 or more	1	2	0

NUMBER OF FACULTY	DOCTORATE	MASTER'S	BACHELOR'S
0	2	0	5
1 - 10	16	6	7
11 - 20	1	1	6
21 - 30	1	4	0
31 - 40	0	2	1
41 - 50	0	1	0
51 or more	0	6	1

NOTE: Totals may not add to 21 due to unusable data reported.

Source: Commission staff analysis of Southern Regional Education Board raw data, 1989.

APPENDIX D

College and Vocational Preparatory Course Approval

FLORIDA
STATE BOARD OF
COMMUNITY COLLEGES
Knott Building
Department of Education
Tallahassee 32399

July 17, 1989

MEMORANDUM

TO: Community College Presidents

FROM: Clark Maxwell, Jr.

SUBJECT: College and Vocational Preparatory Course Approvals

The 1989-90 General Appropriations Act requires college preparatory courses and vocational preparatory courses to be entered in the common course designation and numbering system and approved by the SBCC. On July 14, the State Board of Community Colleges approved the following list of college and vocational preparatory courses for 1989-90.

ENC 001	ENC 020L	ENC 090	ESL 141L	MAT 012L	REA 002L
ENC 001C	ENC 021		ESL 161	MAT 013	REA 003
ENC 001L	ENC 021L	ESL 001	ESL 162	MAT 013L	REA 003L
ENC 002	ENC 022	ESL 002	ESL 162L	MAT 024	REA 004
ENC 002L	ENC 023	ESL 003	ESL 181	MAT 024C	REA 005
ENC 003	ENC 030	ESL 021	ESL 185	MAT 024L	REA 008
ENC 003L	ENC 031	ESL 022		MAT 025	REA 009
ENC 004	ENC 032	ESL 041	IEA 051	MAT 026	REA 010
ENC 005	ENC 033	ESL 042	IEA 100	MAT 027	REA 010L
ENC 006	ENC 035	ESL 081	IEA 101		REA 012
ENC 007	ENC 040	ESL 081L	IEA 110	MTB 001	REA 020
ENC 009	ENC 041	ESL 083	IEA 111	MTB 001C	REA 040
ENC 010	ENC 050	ESL 085	IEA 120	MTB 002	REA 050
ENC 010L	ENC 060	ESL 086	IEA 121	MTB 003	
ENC 011	ENC 061	ESL 090	IEA 131	MTB 004	VPI 001
ENC 011C	ENC 080	ESL 092		MTB 010	VPI 002
ENC 011L	ENC 080L	ESL 093	MAT 002	MTB 013	VPI 111
ENC 012	ENC 081	ESL 094	MAT 002L		VPI 112
ENC 012L	ENC 082	ESL 095	MAT 003	REA 001	VPI 211
ENC 013	ENC 083	ESL 101	MAT 003L	REA 001C	VPI 212
ENC 019	ENC 084	ESL 121	MAT 012	REA 001L	VPI 311
ENC 020	ENC 085	ESL 141	MAT 012C	REA 002	VPI 312
				REA 002C	

APPENDIX E

Designated Area Vocational Education Schools

DESIGNATED AREA VOCATIONAL EDUCATION SCHOOLS
Administered by District School Boards

Thomas P. Haney Area Vocational-Technical Center
Bradford-Union Area Vocational-Technical Center
Atlantic Vocational Technical Center
Sheridan Vocational Technical Center
William T. McFatter Vocational-Technical Center
Charlotte County Vocational-Technical Center
Withlachoochee Vocational and Adult Educational Center
Collier County Vocational-Technical Center
Lindsey Hopkins Technical Education Center
Miami Lakes Technical Education Center
Robert Morgan Vocational Technical Institute
George Stone Area Vocational Center
David G. Erwin Area Vocational-Technical Center
Tampa Bay Area Vocational-Technical Center
Lake County Area Vocational-Technical Center
Lee County Area Vocational-Technical Center
Lively Area Vocational-Technical Center
Manatee Area Vocational-Technical Center
Mid-Florida Technical Institute
Orlando Vocational Technical Center
North Technical Education Center
South Technical Education Center
West Technical Education Center
Pinellas Vocational-Technical Institute
St. Petersburg Vocational-Technical Institute
Maynard A. Traviss Vocational-Technical Center
Ridge Vocational Technical Center
St. Augustine Technical Center
Radford M. Locklin Vocational-Technical Center
Sarasota County Vocational-Technical Center
Suwannee-Hamilton Area Vocational, Technical and Adult Center
Taylor County Area Vocational-Technical Center
Washington-Holmes Area Vocational-Technical Center

ADMINISTERED BY COMMUNITY/JUNIOR COLLEGES

Brevard Community College
Central Florida Community College
Chipola Junior College
Daytona Beach Community College
Florida Community College at Jacksonville
Florida Keys Community College
Indian River Community College
Lake City Community College
North Florida Junior College
Okaloosa-Walton Junior college
Pasco-Hernando Community College
Santa Fe Community College
Seminole Community College
South Florida Junior College

APPENDIX F

Selected Results from Survey of
Vocational Deans and Area Center Directors

In December 1989 a survey questionnaire was developed by Commission staff to collect information from community colleges and area vocational/technical centers regarding vocational preparatory programs. Prior to distribution, the survey was reviewed by staff in the Division of Community Colleges, the Division of Vocational, Adult, and Community Education, and the Division of Public Schools, among others. The survey was sent to 50 selected vocational deans and area center directors, 18 from the community college system, 24 from area centers, and eight from school districts. In addition, a copy of the cover memorandum was sent to district vocational education directors.

The data displayed in the tables represent responses received from 12 community colleges with vocational preparatory programs and 21 centers. Two other colleges reported no vocational qualifying programs. One school district aggregated data from six centers, three of which were designated vocational/technical centers and three of which were skills centers. These six were counted as one response. Additionally, two surveys were submitted from centers that had not been identified as providers of vocational preparatory education but were offering such service. These were included in the returns comprising the area center group.

POSTSECONDARY EDUCATION PLANNING COMMISSION

SURVEY OF SUPERVISORS OF VOCATIONAL PREPARATORY EDUCATION PROGRAMS
December 1989

Date _____

Name _____ Title _____

Program/Institution _____ Phone _____

INSTRUCTIONS: Please answer all items to the best of your knowledge. Unless otherwise indicated, information is requested for academic year 1988-89.

1. To which administrative officer in the institution do you report directly?

   ___ Dean/Director of Vocational Education
   ___ Dean/Vice President of Academic Affairs
   ___ Director of Preparatory Programs
   ___ Other (specify) _____

2. Which best describes how your program offers vocational preparatory education? (check one)

   ____ Through an Individualized Manpower Training System (IMTS) center in a community college.
   ____ Through an IMTS center in a designated area vocational education school.
   ____ Other (explain)_____

3. How many postsecondary adult vocational programs that are 450 clock hours or more did you offer **annually** between July and June during the years listed?

   1985-86 _____ 1986-87 _____ 1987-88 _____ 1988-89 _____

4. For the years listed, indicate your total student enrollments (unduplicated headcount) in postsecondary adult vocational programs of 450 clock hours or more. Also give the number of students in those programs who required vocational preparatory instruction.

Year	Total unduplicated headcount enrollment in vocational programs	Number of students requiring vocational preparatory instruction
1985-86	_____	_____
1986-87	_____	_____
1987-88	_____	_____
1988-89	_____	_____

5. What was your **unduplicated Fall headcount enrollment** (number of individuals with placement scores below mastery level) in each of the following vocational preparatory areas for the years 1985-1989?

	Total (Unduplicated headcount)	Reading	Language	Mathematics
Fall 1985	____	____	____	____
Fall 1986	____	____	____	____
Fall 1987	____	____	____	____
Fall 1988	____	____	____	____
Fall 1989	____	____	____	____

6. Approximately what percent of your students enrolled in vocational preparatory programs in 1988-89 were classified as non-native English speakers?

___ None
___ Less than 10%
___ 11 to 25%
___ 26% to 50%
___ Over 50%

7. Do you require students to correct vocational preparatory deficiencies in communication and computational skills before they can begin vocational coursework?

___ Yes ___ No ___ Sometimes (explain below)

8. What is your perception of the current cutoff scores for referral to vocational preparatory instruction?

___ The scores are set at the appropriate level.

___ The scores are too low.

___ The scores are too high.

___ Other (explain) _____

9. Does your institution encourage students who score somewhat higher than the cutoff scores on the entry-level test to enroll in vocational preparatory instruction?

___ No ___ Yes (explain) _____

10. Do you have students who should receive vocational preparatory instruction but can not receive such instruction because sufficient funds are not available for their enrollment?

___ No ___ Yes (explain) _____

11. Do students in vocational preparatory courses and those in college preparatory courses receive instruction together?

___ No ___ Yes ___ Sometimes (explain below)

12. In your opinion, should State policy require vocational preparatory deficiencies to be corrected before students begin vocational coursework?

___ Yes ___ No ___ Sometimes (explain below)

13. Do you provide a course or program where (other than vocational prep) students who cannot be admitted to vocational programs enroll in order to remediate deficiencies and prepare for vocational program enrollment?

___ Yes (explain below) ___ No

14. How do you provide vocational preparatory instruction? (check all that apply)

___ Traditional classroom lecture/discussion
___ Individualized learning laboratory with instructional modules, packages, or audio/video materials
___ Other (explain) _____

15. If you are using IMTS materials to correct for academic deficiencies, how would you describe the appropriateness of these materials for your students' needs? (check one)

___ Do not use IMTS materials
___ IMTS materials are very appropriate
___ IMTS materials are appropriate
___ IMTS materials are inappropriate
___ IMTS materials are very inappropriate

16. Do you employ instructors who work solely with students on their preparatory education deficiencies?

___ Yes ___ No ___ Sometimes (explain below)

17. Approximately what percentage of your vocational students enrolled in 1988-89 and diagnosed as needing vocational preparatory education actually completed their required remediation within 12 months? (check one)

___ Less than 25% ___ 51% to 75%

___ 26% to 50% ___ 76% to 100%

18. For those enrolled students who did not complete required remediation in 12 months, what was the most frequent reason why they did not? (check one)

___ Had not yet completed the vocational program
___ Left the vocational program with the skills they wanted
___ Had a large number of communication and computational skills to remediate
___ Other (explain) _____

19. How do you track students who are enrolled and diagnosed as requiring preparatory education? (check all that apply)

___ We do not track these students
___ We follow their progress to program completion or withdrawal
___ We conduct follow-up studies of these students within twelve months of program completion or withdrawal
___ Other (explain) _____

20. Using your 1988-89 budget, what were your budgeted amounts by funding source for vocational preparatory instruction?

Source	Amount
IMTS grant	$ _____
College Prep	$ _____
Student Fees	$ _____
Federal(other than IMTS)	$ _____
Other State funding (specify, e.g., Industrial Service, Sunshine State Skills funds) _____	$ _____
Total	$ _____

21. Have you historically maintained separate budgets for vocational preparatory education and IMTS or are they combined?

___ Separate ___ Combined ___ Do not receive IMTS funds

22. The 1989 Legislature stipulated that $6,000,000 of the Community College Program Fund be designated for enhancement of preparatory classes.

(a) Does not apply to our institution.

(b) What percentage of these funds awarded to your institution have been targeted for vocational preparatory education? _____%

(c) How will these monies be used to enhance vocational preparatory education? (explain below)

23. Please list and briefly explain major vocational preparatory issues you believe should be addressed in the Commission's study.

Thank you for your assistance with this study. Please return this survey and supporting documents by **January 19, 1990** to:

Dr. Cheryl Blanco
Postsecondary Education Planning Commission
Florida Education Center
Tallahassee, Florida 32399-0400

TABLE 1

TRENDS IN NUMBER OF PROGRAMS OFFERED THAT REQUIRE VOCATIONAL PREPARATORY EDUCATION 1985 - 1989

	COMMUNITY COLLEGES	CENTERS
Number of programs in 1988-89 was within 10% of number of programs in 1985-86	6	13
Number of programs in 1988-89 exceeded number of programs in 1985-86 by 10 percent	5	3
Number of programs in 1988-89 had declined by at least 10 percent of number of programs in 1985-86	1	5

Source: Commission staff analysis of raw data collected from a survey of vocational preparatory programs, 1989.

TABLE 2

PERCENTAGE OF UNDUPLICATED HEADCOUNT ENROLLMENT IN VOCATIONAL PROGRAMS REQUIRING VOCATIONAL PREPARATORY INSTRUCTION

PERCENT OF UNDUPLICATED HEADCOUNT REQUIRING VOCATIONAL PREPARATORY EDUCATION IN 1988-89	COLLEGES	CENTERS
Less than 10%	2	1
11 to 20%	1	8
21 to 30%	4	3
31 to 40%	2	2
41 to 50%	2	2
Over 50%	0	0
No response	0	5

Source: Commission staff analysis of raw data collected from a survey of vocational preparatory programs, 1989.

TABLE 3

TRENDS IN PROPORTION OF STUDENTS NEEDING REMEDIATION
1985 AND 1989

RELATIONSHIP	COLLEGES	CENTERS
Proportion needing prep in 1988-89 was within 10% of proportion in 1985-86	4	5
Proportion needing prep in 1988-89 exceeded proportion in 1985-86 by 10 percent	5	6
Proportion needing prep in 1988-89 was 10% or more lower than proportion in 1985-86	2	2
No response	0	8

Source: Commission staff analysis of raw data collected from a survey of vocational preparatory programs, 1989.

TABLE 4

PERFORMANCE OF RACIAL/ETHNIC SUBGROUPS
ON BASIC SKILLS TESTS ADMINISTERED THROUGH
THE DIVISION OF VOCATIONAL, ADULT, AND COMMUNITY EDUCATION
1987-88 AND 1988-89

	TOTAL	PASS NUMBER	PASS PERCENT	FAIL NUMBER	FAIL PERCENT
		1987-88			
Whites	16,680	14,873	89.2	1,807	10.8
Blacks	5,386	4,243	78.8	1,143	21.2
Hispanics	2,147	1,696	79.0	451	21.0
Limited English	522	356	68.2	166	31.8
		1988-89			
Whites	14,952	12,607	84.3	2,345	15.7
Blacks	4,832	3,396	70.3	1,436	29.7
Hispanics	2,596	1,563	60.2	1,033	39.8
Limited English	263	148	56.3	115	43.7

Source: Division of Vocational, Adult and Community Education, 1989.

TABLE 5

PERCENTAGE OF VOCATIONAL PREPARATORY PROGRAM STUDENTS
CLASSIFIED AS NON-NATIVE ENGLISH SPEAKERS
1988-89

	COLLEGES	CENTERS
None	0	1
Less than 10%	10	12
11 to 25%	1	4
26 to 50%	1	3
Over 50%	0	1

Source: Commission staff analysis of raw data collected from a survey of vocational preparatory programs, 1989.

TABLE 6

INSTITUTIONAL PERCEPTIONS OF CURRENT ENTRY-LEVEL
CUTOFF SCORES FOR VOCATIONAL PREPARATORY PLACEMENT

	COLLEGES	CENTERS
Scores are at the appropriate level	4	8
Scores are too low	6	5
Scores are too high	0	0
Other	2	7
No response	0	1

Source: Commission staff analysis of raw data collected from a survey of vocational preparatory programs, 1989.

TABLE 7

VOCATIONAL PREPARATORY INSTRUCTION DELIVERY METHODS

	COLLEGES	CENTERS
Traditional classroom lecture/ discussion	3	7
Individualized learning labs with instructional modules, packages, or audio/video materials	12	20
Other	3	5

Source: Commission staff analysis of raw data collected from a survey of vocational preparatory programs, 1989.

TABLE 8

PERCENTAGE OF VOCATIONAL STUDENTS
NEEDING PREPARATORY EDUCATION WHO COMPLETED REQUIRED
REMEDIATION WITHIN 12 MONTHS

	COLLEGES	CENTERS
Less than 25%	2	4
26 to 50%	2	4
51 to 75%	4	4
Over 75%	4	9

Source: Commission staff analysis of raw data collected from a survey of vocational preparatory programs, 1989.

TABLE 9

REASON WHY REQUIRED REMEDIATION NOT COMPLETED

	COLLEGES	CENTERS
Had not yet completed the vocational program	3	4
Left the vocational program with the skills they wanted	6	9
Had a large number of skills to remediate	1	6
Other	2	2

Source: Commission staff analysis of raw data collected from a survey of vocational preparatory programs, 1989.

TABLE 10

TRACKING OF STUDENTS IN VOCATIONAL PREPARATORY EDUCATION

	COLLEGES	CENTERS
Do not track these students	0	4
Follow student progress to program completion or withdrawal	7	14
Conduct follow-up studies of these students within 12 months of program completion or withdrawal	6	7
Other	1	0

Source: Commission staff analysis of raw data collected from a survey of vocational preparatory programs, 1989.

APPENDIX G

IMTS Funding for Community Colleges and
School Districts

IMTS FUNDING FOR COMMUNITY COLLEGES AND
SCHOOL DISTRICTS
1989-90

COMMUNITY COLLEGE	AMOUNT
Brevard	$ 53,445
Central Florida	61,972
Chipola Community	60,100
Daytona Beach Community	70,406
Edison Community	53,250
Florida C C - Jax	83,959
Gulf Coast	83,031
Indian River	51,143
Miami-Dade	171,701
Pensacola Junior	109,383
Polk Community	45,200
Seminole	42,165
Santa Fe	81,490
South Florida	33,000

COUNTY	AMOUNT
Bay	$ 70,842
Broward	62,911
Charlotte	31,747
Dade	72,907
Duval	28,429
Escambia	109.425
Hernando	22,637
Hillsborough	36,231
Lee	68,442
Manatee	44,359
Okaloosa	52,035
Orange	33,642
Pasco	70,549
Pinellas	53,895
Polk	41,096
Santa Rosa	47,500
Sarasota	35,055
Suwanee	21,469
Taylor	53,282
Washington	28,720

Source: Division of Vocational, Adult, and Community Education, 1989.

APPENDIX H

Vocational Preparatory Cost Analysis
1985-86 through 1987-88

College Preparatory Cost Analysis
1985-86 through 1987-88

TABLE I

COLLEGE PREPARATORY COST ANALYSIS
1985-86 THROUGH 1987-88

COMMUNITY COLLEGE SYSTEM

INSTITUTION	1985-86 FTE	1985-86 INSTRUCTIONAL COST/FTE	1986-87 FTE	1986-87 INSTRUCTIONAL COST/FTE	1987-88 FTE	1987-88 INSTRUCTIONAL COST/FTE
Brevard Community College	174.4	1,708.29	199.4	473.72	207.6	562.62
Broward Community College	572.7	1,316.83	756.3	1,093.34	748.6	1,210.59
Central Florida Community College	145.7	1,282.21	161.0	1,481.19	173.8	1,304.65
Chipola Junior College	27.6	3,620.30	32.0	3,938.53	31.5	3,194.70
Daytona Beach Community College	194.8	918.60	221.4	824.69	156.1	1,140.82
Edison Community College	194.6	1,200.35	196.6	1,447.62	191.5	1,599.94
Florida Junior College @ Jax	417.7	2,075.77	360.6	2,193.94	397.3	1,720.39
Florida Keys Community College	23.3	1,932.19	21.3	1,762.25	16.8	1,806.31
Gulf Coast Community College	120.3	2,119.41	130.2	1,920.92	105.5	1,622.15
Hillsborough Community College	468.3	1,481.67	629.9	1,091.64	626.9	1,059.04
Indian River Community College	87.9	1,279.80	71.0	1,660.91	78.5	1,747.28
Lake City Community College	40.1	713.19	127.0	572.62	67.0	865.32
Lake Sumter Community College	39.2	1,425.14	74.6	180.52	69.1	945.46
Manatee Community College	222.1	853.81	179.7	1,258.56	212.6	1,104.70

INSTITUTION	1985-86 FTE	1985-86 INSTRUCTIONAL COST/FTE	1986-87 FTE	1986-87 INSTRUCTIONAL COST/FTE	1987-88 FTE	1987-88 INSTRUCTIONAL COST/FTE
Miami-Dade Community College	2,182.1	1,199.06	2,646.5	1,142.89	2,932.6	1,257.41
North Florida Junior College	32.5	2,052.31	41.7	1,567.92	37.9	1,757.78
Okaloosa-Walton Community College	67.6	1,316.01	82.4	956.23	103.0	1,106.15
Palm Beach Junior College	263.7	1,616.47	297.7	1,658.76	348.0	1,490.63
Pasco-Hernando Community College	58.5	1,666.77	70.5	1,626.66	77.4	1,580.80
Pensacola Community College	210.3	788.84	308.8	775.52	287.8	846.37
Polk Community College	84.7	1,224.71	106.2	1,324.49	108.4	1,452.49
St. Johns River Community College	23.3	1,610.21	23.7	1,788.10	38.2	1,240.84
St. Petersburg Junior College	500.5	1,717.39	611.4	1,635.03	614.1	1,749.10
Santa Fe Community College	433.2	1,075.72	487.4	1,083.91	486.2	1,053.61
Seminole Community College	139.1	1,320.70	138.8	1,494.32	149.5	1,762.70
South Florida Junior College	26.5	534.60	18.1	2,299.37	20.3	2,906.15
Tallahassee Community College	154.0	1,179.39	220.1	921.00	220.1	1,168.23
Valencia Community College	516.6	879.47	537.3	1,048.06	581.1	1,176.13
All Colleges	7,421.3	1,315.30	8,751.6	1,228.84	9,087.4	1,285.98

Source: Division of Community Colleges, 1989.

TABLE 2

VOCATIONAL PREPARATORY COST ANALYSIS
1985-86 THROUGH 1987-88

INSTITUTION	1985-86 FTE	1985-86 TOTAL COST/FTE	1986-87 FTE	1986-87 TOTAL COST/FTE	1987-88 FTE	1987-88 TOTAL COST/FTE
Central Florida Community College	8.8	3,079.43	9.0	2,852.00	16.0	1,574.69
Chipola Junior College	19.7	2,169.67	40.2	1,038.27	47.4	1,269.13
Lake City Community College	183.9	714.26	17.2	1,223.86	5.1	1,509.73
Okaloosa-Walton Community College	10.1	1,533.80	45.9	756.29	123.1	763.77
Palm Beach Junior College	4.1	-	13.4	--	10.8	--
Pensacola Community College	--	--	47.8	138.54	62.1	168.94
Polk Community College	13.9	--	13.7	--	--	--
Santa Fe Community College	--	--	8.8	1,886.25	6.8	745.74
Seminole Community College	7.5	12,586.03	18.7	2,924.99	19.5	2,070.31
South Florida Junior College	2.0	--	79.8	394.97	31.2	--
All Colleges	250.0	1,244.32	294.5	789.84	322.0	913.00

Source: Division of Community Colleges, 1989.

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